The Iron Age

A Review of the Hardware and Metal Trades.

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Baker's Rotary Blower.

or ends upon which the bearings are bolted are also faced off true; the case is secured to plaints of loose wheels. the ends by bolts, and when in exact position the ends are doweled so that when the case is removed it can be returned to its proper position without much trouble or delay; the base is cast in one piece and faced on its upper side, and bolted firmly to the ends of the machine; the drums are each one solid fron casting, turned up true and balanced, thus insuring closeness, and, at the same time, steadiness the central drum to pass; these openings or slots are made considerable wider than is flange wear is occasioned needed for the passage of the wings; this is done to insure perfect freedom in action, and, leaving. As each drum only acts as abutments experienced railroad men attribute nine-tenths which the wheels are to be placed. alternately, the power required to drive them of this defect to that cause. As much as is My practice has always been to break up all wrought iron, and is called chilling.

k.

The wings of the central drum are faced off and holted on firmly. and are cast in the requisite form to insure the greatest strength in proportion to their weight. The gearing, which is made exceedingly strong, is only intended to keep the drums in proper position. The bearings and journals are made extra large, to secure as large a bearing surface as pos sible, and to give to the journals a great degree of strength, so as to prevent them from springing in the bearings, and to overcome rapid wear. A shield is placed over the gears to prevent accidents. There is only one pulley to each machine, and as this is made with a diameter large enough to give the belt a good running speed, and with breadth amply sufficient for the purpose, the necessity of furnishing extra belts, pulleys, counter shafts, etc., is avolded and the expense saved. The great trouble, heretofore, has been to build a rotary pressure blower in few parts, of sufficient strength and ease of motion to stand the work they generally receive. In the Baker blower the working parts are made exceedingly strong, and there is no point in actual contact (although working very close) in its internal movements; hence, the tendency to hammer itself apart is entirely removed. As there is no material to shrink in dry

weather, or to expand in equire replacing, nor will the machine have to be remedied. be taken apart for internal repairs.

makers fuller particulars may be obtained.

The Manufacture of Car Wheels.

G. G. Lobdell, of Wilmington, Del., read at the December meeting of the Master Car Builders' Association:

discovered, too, that in attempting to make in their work. cted as a wedge tending to burst the wheel increased exigences of the service demanded.

them, and a similar number of cuts from the stant strain and abrasion.

axle, so as to insure a perfect fit between the I can see no help for this until those controll-

we have never been troubled with any com- as great a degree as that of any other article difficulty.

Flange Wear .- This also is an important skill of the maker. This, in view of the large matter for two reasons: number of really responsible wheel makers,

1. Quite often a wheel but partly worn opposite one badly worn on the flange has to be the difficulty of mating it.

flange worn thin.

This defect (flange wear) can probably be gauging, to insure perfect success. when running; the two lower drums are slot-ted their entire length, to allow the wing of and mating, position of wheel in the truck, and chilled wheel is constant vigilance—constant the proper per cent. of fixed carbon, possess

is merely to overcome the friction of the jour- traceable to improper gauging and mating, by wheels about which there is the least doubt; It is a well known fact that some steel will the tread is confined almost exclusively to

ing the purchase of wheels discriminate in favor This blower is made entirely of iron. The cylindrical portion or case is bored out and faced on the ends; the heads of the machine the precautions in fitting I have just stated, used on railroads on the care, experience and

> certainly would not be a difficult task. I know of no branch of metallurgy that re- fracture. thrown in the scrap pile, simply on account of quires more constant attention and practical knowledge. Constant care is necessary in the bination not free, 2. The liability of breaking resulting from a molding, the mixing of the iron, the melting, the cooling or annealing, the selecting and

It may be said that the price of a perfect difference in hardness of chill. Probably less vigilance on the part of some one who has a the property of being hardened when cooled directed, and which your Association has disflange wear is occasioned from the last-men- greater interest than his weekly wages or salary, suddenly, which hardening is due in either case, cussed. agency, or share of the profits—the vigilance of not as some suppose to a chemical change, but How much improper tramming has to do with one whose reputation is at stake, and who has to a different arrangement of the particles comat the same time, to remove the danger of the the matter I leave to the Association of Car- a conscientious regard for the lives of those posing the parts hardened. wings coming in contact when entering or Builders to determine, merely stating that some who travel in the cars and on the engines under

1°80, very hard cast steel, forging with great

1.90, steel not malleable hot.

mered.

4, white cast iron, carbon and chemical com- I am firmly convinced that those ores that

5, mottled east iron

61/2, carbonized cast iron.

Both cast iron and steel, when they contain

ing run against a smooth surface of cast or is a fact.

1.10 makes cast steel requiring more hard- fact that the ores differ in different parts of 1:50. Hmit for steel of maximum hardness and may take place in the working of the blast furnace.

Again, there are kinds of iron that have all the chilling properties desired, but which do not possess sufficient tenacity to warrant their 2.00, lower limit of cast iron, cannot be ham- being used for railroad wheels. In fact, there are very few irons that have all the properties 214 to 3, first approach to a granulated necessary to make a good wheel when used

contain the least sulphur and phosphorus make the best chilled castings requiring strength; that the ore should be smelted with charcoal, 8. super carbonized cast iron (silver white). and with the blast cold or nearly so.

As to another defect, viz., blotches. This is a subject to which considerable attention is

That this is a defect to which all chilled wheels are liable, and also that more of this defect is evident since the equipment has been In cast iron it is produced by molten iron be- made so much heavier and the speed greater,

As far as my observation goes, this defect on

wheels of small diameter and those that are used under heavy engines, tenders and cars running at a high rate of speed, and more particularly tender wheels than others. As to its cause, I am not prepared to say at this time. will say, however, that I am convinced it does not arise from the use of any particular character of iron, either hematite or magnetic and specular. as I can readily prove by the samples I present for your examination. This defect is one that the manufacturer will gradually overcome, and although unsightly is not a dangerous one. All the tests that can be applie. fail to discover this dofect before the wheel 16 put in use.

Railroal wheels are subjected to harder service and have to stand sever r test than formerly. This is on account of the increased speed and weight of cars and engines; consequently the smaller the wheel the more perfect should be

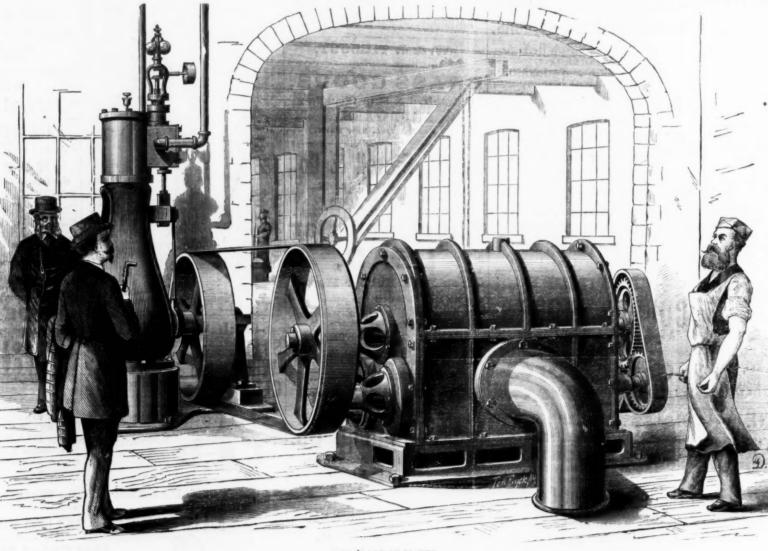
the chill. Notwithstanding the increase in the speed and weight of engines and cars, I believe there is no necessity to resort to cast steel wheels, which are open to the objection of increased expense, unequal wear, the injurious action of the trake , as in

holding or sliding. After many careful and expensive experiments with every kind of iron, east with wrought iron

chargoal iron, free from sulphur and phospho-The same is true of the chills of different rus, and made with the blast cold or not too

With care in the selection of one and care and Now, as to what constitutes the chill; I do and wear longer when subject to abrasion, skill in the manufacture of railroad wheels, they than on others; in some the chill will have point of the flange breaks by reason of badly more or less pimples; some are inclined to aligned frogs or track. They should be chilled What is cast iron, and what is steel, and in chill-crack; some will not make smooth chills, uniformly and deep enough not to wear in flat places unless held by the brake. Such wheels I will here say that my experience in the have been made, and they can and will be made manufacture of chilled castings, including rail- again. All the responsible wheel in ther asks managed by those not practically acquainted nation with carbon, silicon, sulphur, phos- road wheels, tires and rolls, proves to me that is a fair price for his product and relief from

> The Scotia Iron Works, at Leesburg, on the bon, or nearly all of it, and more or less of specular, bog, fossifera, etc., but to some pe- Atlantic & Pacific Railroad, were incorporated culiarity of the particular deposit, or the man- in 1869, with a capital of \$100,000. The company ner in which the ore had been smelted, or to a own about 10,000 acres of land, a portion of want of care in the manufacture or selection of which is timber land, which furnishes charcoal, and the balance ore land, the principal feature I have made perfect wheels of iron wholly of of which is two ore banks of red oxide and blue ores. Also a mixture of two or more of these nace. They have one charcoal furnace, the dimensions of which are: stack, 40 feet in hight: I have also found that iron made at different 9 feet 4 inches at boshes. This furnace has retimes in the same furnace and from ores from cently completed a ten months' run, baving the same bed or vein will differ so much in its made 8529 tons of metal, 7132 tons of it being



wet, nor bolts and nuts to become loose, the a little care on the part of wheel makers and to break up hundreds rather than run the rick harden better than others; that is, will not and steel, I am satisfied that the best and

These blowers are made under the American discussion. I start out with the assertion that Lobdell, or Lobdell, or Lobdell Co. wheel. Break kinds of cast iron; some not only chills more hot. tent by T. Wilbraham & Bros., 2316 Frank-less accidents are caused by the breakage of age is not a characteristic of the wheel. lord avenue, Philadelphia; and under English, wheels than that of rails or other material; makers are better able to test more accurately subject, but I will allude to a few facts conthe character of their product.

The reason why there are wheels put in use We take the following from a paper by Mr. wear badly, is, in a great measure, from this ferent? cause. Quite a number of wheel foundries are with the business, the practical part being under We bore our wheels on a vertical boring mill the charge of parties having no further interest of the usual form, but use four jaws on our in it than their salaries, and who have not had hucks instead of three, in order to secure the that experience in the business and knowledge wheel being chucked perfectly true. We have of metallurgy to insure the greatest perfection

too much progress in boring by forcing the I might add here that I think breakage is cutters and taking only two cuts through the likely to result from some inherent defect in wheel, the wheels would oftentimes not be the pattern used and in a disposition to reduce ored cylindrical, and if the axles were turned the weight of the wheel (in order to cheapen perfect cylinder, or as nearly so as possible, it the product) below a standard required by the

when being forced on. The converse of this is

The velocity with which a wheel running at
the rate of forty miles per hour revolves is fear-We have, therefore, adopted as a rule to take ful, and the only wonder is that an article male three cuts through our wheels when borng of cast iron, or even steel, can stand the con-

sait, I have yet to learn of the first person cutting edge longer. Now, as to the most important point under killed or maimed by the breaking of a Bush &

French and German patents by Chas. Asbury, and it is so, because generally more care is belimingham, England. From either of these nected therewith.

that do break, are not perfectly chilled and what respects are they alike, and in what dif- and possess other imperfections.

Iron is seldom found pure, but in combiphorus, manganese, titanium, copper and other substances. Wrought iron is cast iron from which by some refining process the carother substances, such as silicon, sulphur, etc., have been expelled.

Steel may be defined as fron in which there is chemically combined a sufficient amount of

More than 1.90 per cent. of carbon makes cast fron.

0.66 makes fron semi-steelified. 0.83 makes soft cast steel capable of being

1.00 makes cast steel for common purposes.

internal working parts of the blower will not those having charge of the fitting, can easily of sending one bad wheel away, and, as a re- only cut a hard substance, but will maintain a cheapest railroad wheel can be made of good

readily than others, but the chill will be harder

the defects spoken of are not due to or confined unjust competition.—Railroad Gazette. to the use of iron made of any one of the difthe wheels.

carbon, from 0.83 to 1.90 per cent., to give it hematite, magnetic, specular, bog and fosifera specular ores, which yield 50 per cent. in fur-

character as to require mixing in different proportions with other iron. This is due to the the extraordinary run of 1034 tons.

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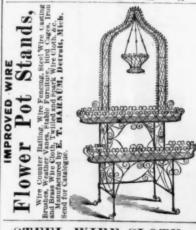
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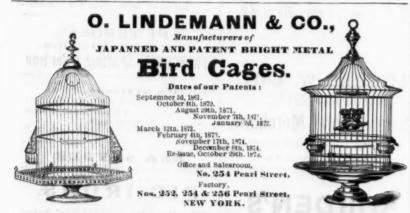


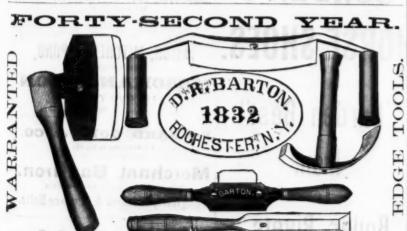
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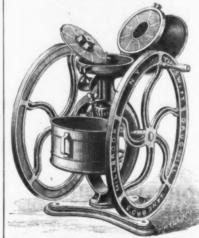
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A correspondent of Iron furnishes the fol-

which the casters melt or cast the metal. Brass is, as most of our readers are aware, ing in different proportions, according to the as it is, does not cover them all, for in most quality required. In strip metal of the best very good brass, and a common article is prothree of the latter. When melted, the liquid metal is poured into ingots, popularly called "sows," in other words "pigs." In casting, great care has to be paid to the melting and he metal shall be of one uniform color-a very man different tints would be produced, and the olor would not be uniform.

Before we pass to the molding, we may otice here that all the filings, scraps of metal, and other refuse are carefully preserved, edious process, and used to be done by hand, with magnets properly held to draw out the steel and iron. It is now done by a very ingenious machine. ropper, whence it falls into a box in which revolves a cylinder on which magnets are fixed These draw away all the steel and iron, which bass into receptacles, and the cleansed brass ust flows out of the machine down a spout nto a box below. The sweepings of the shops and yard are collected and sold to refiners, who ve are visiting forms an important item in the

he work-namely, casting and molding. Mr. W. C. Aitken, whose practical knowledge of all that relates to the metal trades is probably not urpassed by any living writer, gives the following admirably clear description of this work. "The appliances," he says, "are a sand trough, free, good and fine sand, cast Iron wood molding frames or boxes, fitted together in two parts, molding boards, clamps to hold the boxes together when closed, furnaces, Stourbridge clay or plumbago, crucible and ovens to dry ores. The process of molding consists in fill ng the first half of the box with sand; when filled, the patterns, if flat, are simply laid on the surface; if circular, they are driven in to half their diameter; dry parting sand is dusted all over the surface of the first half of the box; this is in order to separate the two halves of the box more readily; the upper half of the box is then dropped on, and is held there by dowels. The sand is then filled in and beaten down, a nolding board is placed on the back, the box separated (which is easily done, owing to the parting sand); the patterns litted out, 'gets,' or connections are formed by cutting away the sand and connecting them with the appertures of the box provided for the introduction of the The mold is then dusted over with bean' flour, dried when necessary, the two parts or halves of the box closed together, and held in that position by clamps; the metal is poured in, and a perfect copy of the original pattern or mold is produced. In fine casting the mold is dusted over with 'loam' or fine sand, thereafter with wood charcoal powder; it is then placed over the pattern again and beaten; the fine sand and charcoal powder copies sharply all the details of chasing and minute markings in the pattern. Cored casting is a more complicated operation, as it will be readily understood that when draperies with their folds and undercuttings are introduced, on the attempted removal of the pattern or model, the portions of avoid the breaking away of the sand, the mol der has to form small pieces of sand into por tions or cores, which he can remove: a great number of 'false cores' have to be made in these castings. These, as has already been stated, require to be so framed that they can be removed before the model is withdrawn, and require to be replaced before closing the mold or box. As the looseness of any one of these 'cores' would spoil the casting, the cores require great skill in formation and placing. Molding, from an ordinary process is, in this kind of molding, elevated into the confines of art, and is consequently an expensive opera-" Tae molds are baked hard, being placed before a stove and left until they are dried through. In common casting of ordinary plain patterns, without any "wrought" parts in them, the metal is not so highly fused, and the nolds are not baked. When screws, spikes, or ooks have to be affixed to any parts of the castings, they are placed in the molds or "side," and are thus fixed into the liquid metal, and when cooled from an integral part of the article

into the rough warehouse, and weighed against the easters, and hence the various parts are delivered to the different workmen. They are owing account of a visit to the brass foundry sorted by girls, whose lightness of hand seem of Thos. Pemberton & Sons, Birmingham, well adapted for this kind of work. The mulwhich contains much information of interest to tiplicity of articles is perfectly astounding, for every article used in cabinet brass work is here Our first visit was to the mixing shop, in produced, the names of which would fill a good sized book. Al' articles are designated by numbers, and at Messrs, Pemberton's they have made of copper and spelter, mixed in the cast-reached beyond 10,000, and this number, large quality the proportion is three and a half of in some cases, twenty sizes. When sorted, the opper to one of spelter; a mixture of two and men come with their order books, and receive half of copper to one of spelter produces all the parts of the articles belonging to each order, take them to their respective shops to be luced by a mixture of five of the former to dressed or finished, and then returned for lacquering and wrapping up.

An important part of brass work is "dipping." Mr. Aitken furnishes the following lucid account of this process. All the condiouring of the metal. In Messrs. Pemberton's tions required are to be found in full operation corks the metal thus produced is all recast by at Messrs. Pemberton's. "The shop is," he rdinary casting. The object of this is that says, "or should be, a well-ventilated, high 'jowl,' or brown earthenware open-mouth vespure water, on the surface of which is strewed a small quantity of argol, or tartar. In this condition the workmen holds them in his vice, or, if round or globular, places them on the chuck in his lathe."

Burnishing is also an interesting part of the work. The articles are put in water containing "argol," and a mixture of gall and vine gar, then placed in a pan of sawdust, and put over a stove to dry. Burnishing is done in lathes and vises, and several kinds of burnishers are used in the process. In burnishing the rings for cornice poles, the ring is not fixed on the chuck, but held on a round chuck by the left hand of the worker, while he burnishes it with the right, the fingers of the left hand being guarded by strong metal thimbles.

In the case of joined work, such as chains, &c., which cannot be cast together, the parts are joined by soldering. The parts are placed on a flat piece of metal, which is put on a hollow revolving table filled with cinders. The must be dealt with and prevented. In order to and, a jet of gas, forced down by a blow-pipe in an elastic tube, is turned upon the parts A boy, by means of a foot treadle, blows the bellows, and the workman turns the pipe on the work, forcing the heat on the parts to be soldered. In less time than it takes to describe it, the soldering of many joints is effected. The heat can be put on and turned off in a moment

Among the most interesting processes of the trade must be placed bronzing. The different colors produced by bronzing are steel, black, green, copper and Florentine. In steel, the article to be bronzed is covered with acid made of various chemical substances, and is brushed by a revolving scratch brush made of wire. In this case the article is not heated at all, but in green bronzing it is heated a little; a liquid is after ward applied by a brush, and it is then dried on a stove to absorb the liquid out of the pores of the metal. It is then covered with the solution again. In black and green bronzing, the article is covered with black lead, and carefully brushed with a hand brush. In the latter case the color is entirely produced by lacquer,

when cooled from an integral part of the article cast.

Casting is the unhealthiest part of brass work, for in pouring the metal either into the ingots or molds, the fumes of the spelter rise and pass into the lungs of the men. To prevent this mischlef to some extent, each pourer binds a handkerchief round his mouth and nostrils while engaged in emptying the pots.

When the molds are opened, the castings are more or less covered with sand. This is removed by placing them in a "shaking barrel," by turning which all the particles are shaken off.

roofed apartment, with abundant provision for mportant thing in cabinet brass work. If the the escape of the fumes of the acid. It is built admixture of the metal were left to the work- round interiorly with brickwork, on which to place the tubs which contain the water to kill the acid, and the 'jowls' or earthenware vesse's in which the various strengths of said are contained. There should also be a muffle in which to anneal the work, and horizonal plate leaned, and remelted into brass. In this of Iron with provision to heat it, in order to rocess the iron and steel, which has been keep the box-wood receptacle or sheet iron pan nixed with the brass in working, has to be and its contents at a moderate temperature arefully extracted. Formerly this was a very This shop should be in connection with a space or yard in which to place the pickle troughs, and there should be ample provision for the supply of clean, cold water; if soft water, so The refuse is put into a much the better; also a set boiler in which to keep hot a supply of ley or alkaline solution, as potash of soda. The materials employed are quafortis of various strengths, pure water, and argol, i. e., the refuse or sediment of wins casks, or crude tartar in the form of a powder. After annealing, the work is immersed in a weak solution of pickle, to 'scale it,' or remove the exextract the meta! which they contain. The ternal skin. After rinsing it out, it is brushed yearly value of the "waste" at such works as with sand, to remove the more firmly adherent scales. Again pickled, if uniformly clean, it is then in a condition to receive a final finish, if We now come to the most interesting part of bright dipped; and, if dead dipped, to be sub-ne work—namely, casting and molding. Mr. jected to the 'deadening' process, which is conducted as follows: The aquafortis is reduced from its dipping strength by means of water, or a special variety is used and designated by the name of 'deadening aqua.' A quantity of either the former or latter is poured into a self. The articles are placed therein, and the jowl agitated till a creamy coating is observable over their entire surface; they are then removed and washed out in water. After they are cooled and the acid 'killed' they are passed through the strong aquafortis, rinsed out in three several tubs of water, and then dried out in warm box-sawdust contained in the sheet iron pan already alluded to. Any acid which may have accidentally insinuated itself into defects in the work is neutralized by immersion in the 'ley' or alkaline solution contained in the boiler. After the articles are dried out they are then plunged into a tub containing Fron.

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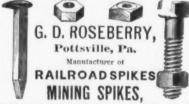
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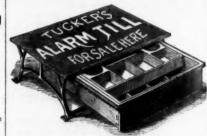
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The Bullion Product.

The total bullion product of the Pacific States and Territories for the year 1878 was \$72,258,693. This year it was \$74,401,055 showing an increase of \$2,142,302 over 1873. Juo. J. Valentine, general superintendent of Wells, Fargo & Co.'s Express, who computes the most reliable statistics on this point, writes as follows

We hand you herewith a copy of our annual statement of precious meta's produced in the States and Territories west of the Missouri River, including British Columbia, during 1874, which shows an aggregate yield of \$74,401,055, being an excess of \$2,142,362 over 1873. California, Nevada, Utah, Colorado and British Columbia increased; Oregon, Washington, Idaho, Montana, Arizona and Mexico (west coast) decreased. The increase in Nevada and Colorado is merely nominal, but in California and Utah it is \$3,100,000, three-fourths of which is to the credit of California

d Total	nia. a. ngton na. a. do columbia.	and Terri- tories.
\$24,114,833	\$16,015,568 \$45,394 \$53,564 141,396 1,207,687 2,681,362 23,721 23,233 1,590,700 84,655 1,487,473	Gold Dust and Bullion by Express.
\$2,243,943	\$1.601.556 34.539 34.539 11.139 120.765 258.136 8.872 2,833 148,747	Gold Dust and Bullion by other Conveyances.
\$35,681,411	\$967,857 30,954,602 150 551,572 746,565 400 1,745,805 714,923	Silver Bullion by Express.
\$12,360,868	\$1,715,550 4,117,698 600,000 5,072,630 835,000	Ores and Base Bullion by Freight.
\$74,401,055	\$30,300,561 35,452,233 609,070 185,535 1,890,0n4 3,439,498 5,911,278 26,006 4,191,405 798,878 1,636,557	Totals.

In our statement for 1873 we referred to the yield-\$72,258,693-as "undoubtedly the largest, for one year in the history of the coast." The accuracy of the statement has been quer tioned, and the yield of 1853 referred to as be ing greater. Dr. Linderman, director of the reliable as may be had, names \$65,000,000 as the amount produced in 1853, and that amount was not exceeded until 1873, which is now exceeded by 1874, and the recent developments on the Comstock lode justify the belief that the total product for 1875 will approximate \$80,000,000. JNO. J. VALENTINE,

General Superintendent

English capital is seeking investment in the oal and iron lands of the Southwestern States to a considerable extent, and the development of that section will probably be accomplished chiefly by those who represent foreign owners. The Chattanooga Commercial says : We see by the Jasper Herald that a suit has been pending in the Chancery Court at that place to settle the titles to a large body of mountain lands, and also to confirm the sales of the same to a party of English capitalists who, through their agents, Messrs. Lowe & Thomasson, of this city, have purchased a large body of these lands-the sale and title have been confirmed, and money deposited in bank for payment as soon as proper writings can be perfectedthese lands, some 30,000 to 40,000 acres, consist of the most valuable coal lands in the United States, averaging in the aggregate a

total thickness of 25 to 30 feet of solid coal. The amount of gas made by the Philadelphia gas works in 1874 was 1,766,268,000 cubic feet, an increase over the year 1873 of 117,681,000 cubic feet. The largest consumption in any twenty four hours was on the night of the 34th of December, amounting to 7,826,000, being an Nos. 3 and 5 Wall Street,
NEW YORK.
HARDWARE, METAL, IRON, RUBBER, SHOE
PAPER AND PAPER-HANGINGS, LUMBER, COAL

Of December, amounting to 7,826,000, being an increase over the largest of last year of 787,000 eulic feet. The street mains laid during the year were 36,362 feet, making the entire length of 612 miles. The whole number of lamps on the 1st inst. was 9005; 9441 are supplied with try of England than the latter could hold its own while fetted by the exorbitant price of gas from these works, and 464 with gas from the Northern Liberties Works.

> Wages are being reduced in the ship yards of England and Scotland. Beginning with this month engineers' wages were to be reduced 10 per cent.; boiler makers' from 10 to 15 per cent. and joiners, '5 per cent. "As a general rule," the Manchester Guardian says, "wages are settling themselves, as the number of unemp.oyed skilled engineers and workers in the mechanical trades is rapidly increasing all over he industrial districts.'

It has been decided to build a dock capable of maintaining a full size iron clad at Esquimault, in British Columbia. The British government has promised to pay \$250,000 toward the cost of its construction, and it is expected the Canadian will do the same.

The orders received in Sheffield, England, from America, for files, saws, tools and cutlery were lighter during the last season than they have ever been. This is largely owing to home made articles taking the place of British throughout the country.

Canal.

The British Iron Trade.

Iron thus reviews the course of the iron trade in 1874

"The misgivings expressed twelve months ago as to the future of the English iron trade have been only too faithfully realized by the experience of that period of transition and diffleulty through which our manufacturers can hardly be said to have passed. It was felt that bad days were in store; and that, although an appearance of prosperity was kept up by the

working out of old contracts, that vitality which for three years past had distinguished the iron market had revealed signs of partial extinction. It is true that Glasgow warrants found purchasers at 107, and that contracts for Durham coke were freely entered into at 28, to 32 per ton, but the industry of Sheffield was already drooping—the slackness of the cast steel trade having been followed by a serious failing off in the demand for railway muterial. High prices for South Staffordshire coal had already produced a lull in the finished iron trade of that important district, and in Cleveland the outlook was hardly more favorable than in the West Riding. On every side complaints were made of the unreasonable price of fuel, and it was forseen that unless this were reduced the iron works of the country must come to a standstill. Sheffield formed fervent aspirations that the price of coke might once more be 18,6, as of old, and predicted that this consummation would referes all grievances and smooth every difficulty in the iron and steel trade.

"At the turn of the year the price of fuel fell, but reductions, long expected and far the tardity made, failed to produce their legitimate effect, on account of the uncertainty felt as to the coming action of the coal miners. It was only too well known that the trades unions were rich and well prepared for a prolonged struggle which could have but one effect—the reduction of the iron trade to complete stagnation. Great reluctance to enter into forward contracts was shown on all sides. Iron makers were fenced in by the price of fuel, and certainly unprofitable, to enter into any computation of the loss sustained from the impossibility of doing business under these unfavorable circumstances; but it is only fair to admit that the workmen, both in ead price of fuel, and certainly unprofitable, to enter into any computation of the loss sustained from the impossibility of doing business under these unfavorable circumstances; but it is only fair to admit that the workmen, both in

ously competed for—not only by Belgian, but by German and French manufacturers—and the acquirement of some share of business by these energetic rivals produced an impression in this country which could hardly have been expected by those best acquainted with the phlegmatic character of Englishmen. A species of "scare" was produced, and English frou workers were for the first time taught to dread the foreigner.

"When the total iron and steel production of Belgium is considered, it becomes more than ever wonderful that a little country which, although endowed with seams of her own, is, on the sudden access of activity in iron production, compelled to have recourse to her neighbors, and notably to England, for coal, should inspire lively alarm. Nothing but the exceptionally high prices too long maintained in this country could have stimulated an attempt to fight English iron makers on their own ground; but, although lower rates encourage us to dismiss as futile all fear of the foreigner in our home markets, it would argue blindness on our part to deny that the Continental trade has been seriously affected by the struggle of foreign makers to hold their own against us in their own countries. Recent contracts for Russia and Germany have been warmly contested, and there can be no doubt that had our makers not been assisted by reductions in the cost of production we should in many cases have been worsted; but the latest advices reveal that the cheap labor of the Continent can no more compete against the organized industry of England than the latter could hold its

own while fetted by the exorbitant price of fuel.

"Making every allowance for the stagnation occasioned by the rise of prices to so great a hight as to cause a cessation of orders, we must yet seek lower down for the causes of the dullness which has hung over both the from and steel trades for the past year. The most important of them is undoubtedly the cessation of the tradest American demand, which to research. steel trades for the past year. The most important of them is Endoubtedly the cessation of that great American demand, which for several years communicated unexampled activity to English fron production. The American clisis of 1873 has fadled to blow over, like many similar storms, without leaving any permanent trace, but has unhappily shown not the strength but the weakness of a great country, struggling against heavy taxation, in the trammels of centracting circulation. Railway projects, once asserted to be necessary for developing rich tracts of country, have been abandoned for want of capital to carry them out, and the great trans-Atlantic demand for railway material of all kinds has for the present come to an end. Taught by the example of America, other countries have exhibited a reasonable caution in prematurely extending their iron roads, and it is evident that until a fresh impulse be given to railroad construction we cannot look abroad for those great contracts which have, during past prosperous times, helped to enrich our miners and manufacturers. On the other hand, we may find some consolation at home in the reflection that great extensions are contemplated in the railway and tramway avstems of the reflection that great extensions are contemp The ten iron clads in the German fleet are as follows: Three heavy broadside frigates, two heavy broadside turret ships, two light broadside frigates, one convette and two smaller vessels.

The British government has ordered one of the ships of the royal navy to resurvey the Suez Canal.

ompete against the organized

eron.

CLEVELAND.

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OLIVER'S



(Exclusive of sales in new territory), while for the season of 1875, the canacity of the works has been increased to turn out 30,000 plows complete. The cause of this astounding result is that the OLIVER CHILLED PLOWS prove on trial to be all and more than we claim for them, on following points, viz.:

1st. They are the lightest draft.
2nd. They are the most durable.
3rd. They are perfectly adjustable and have a certer draft.

and. They are the most durable.

3rd. They are perfectly adjustable and have a center draft.

4th. They will scour in all kinds of soil.

5th. They are the cheapest plow used.

6th. They are the chly chilled plows made.

Our first point is secured by the share and moldboard forming one continuous curve, thus compell

ing the soil to touch every part with equal firmness;

the shape is easy and natural and abrapt angles do

not exist, while our chilled iron posserees a peculiar

emoothness and solidity throughout, far shead of

any other metal used in plows.

Our second point needs no explanation from us.

as chilled iron is conceded by all to be the hardest

and most durable metal used for this purpose.

Its temper is uniformly hard, and will not scratch

nor corrode.

Our third point is secured by a movable beam,

placed over the center of the work, which can be so

nicely adjusted by moving to the right or left, that

the plow will run without handling. With these

plows the most uninteresting portion of farm labor

becomes a pleasure and a pride.

Our fourth point is secured by the combination of

our chilled metal. with the common sense shape of

moldboard and share. Every part of the metal below

the ground is subject to equal wear, leaving no 1 or
tion untouched to which the soil can attach and clog

the plow. The change from gravelly to prairie soil

can be made with satety, as the metal is so Lard that

it cannot be scratched; hence, its peculiar smooth
ness is not disturbed, and scour it must.

Our fifth claim is easy to substantiate, for the draft

of OLLVERY'S CHILLEL PLOY We will

ness is no: disturbed, and scour it must.
Our fith claim is easy to substantiate, for the draft of OLLVER'S CHILLED PLOWS will average fully twenty-five per cent. below that of all others, which means that, out of every four days work with other plows, the labor of one gay can be saved, by using

OLIVER'S CHILLED PLOWS,

with the same amount of power expended. The great durability of these plows, consequent upon the extreme uniformity and hardness of the chilled metal, is another item to be considered in this con-

nection.

Our chilled moldboards, after plowing one hundred acres, show a loss of weight of from four to seven ounces, depending on the soil in which the

sed. is result cannot be equaled, much less surpassed by other metal, or combination of metals, eve

This result cannot be equated, much less surpassen, by any other metal, or combination of metals, ever used in plows.

Our sixth claim we will not ducens here, but should it be disputed by any one, we shall be happy to convince the most skeptical of its truthfulnes. Call on us for the proofs at any time, and we pledge our words they shall be produced.

We are the only manufacturers in the world that devote their entire capital, time and facilities to the production of plows, and the natural result is, perfection in the implement produced under such circumstances.

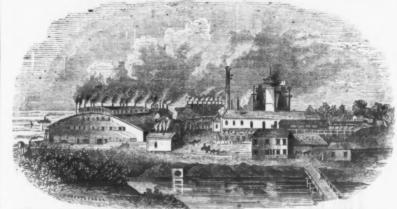
cumstances.

For full descriptive circulars explaining the merits OLIVER'S CHILLED PLOWS,

or other information relative thereto, address, South Bend Iron Works, SOUTH BEND, IND.

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SASH CHAIN.

The Meier Iron Works.

was resorted to for the most important founda-

tions. Those of the two furnaces, eight White-

well stoves, and the large smoke stack, rests on

white oak plles of about 12 to 14 inches diame-

The St. Louis Democrat says:

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can be balanced without the use of weights, or loss of ne. This improvement cannot be found in any other

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danufacturers of Doty's Revolving Road Scrap-ers, Mammoth Road Plows, and R. R. and Canal Barrows, with Pat. Wheele, Send for Circular and Price List.

fire. Dr. Kosch at the same time makes use of a specially prepared enamel, which he spreads over the surface to be painted on, and This company has been building two blast by which the irregularities and porosities of furnaces at a point opposite Ellwood street, the porcelain are as thoroughly concealed from furnaces at a point opposite Environ street the porceign are as thoroughly content and view as if they were covered with thin, smooth, the carondelet Railway. The station has been named Bessemer, in honor of Sir Henry Bessement and the porceign are as thoroughly content and view as if they were covered with thin, smooth, fine linen. The importance of such a surface medium will be fully understood by all who mer, the inventor of the celebrated steel pro- are practically conversant with the difficulty of preventing the irregular and undue absorption

cess.

The works are very extensive and built in a most substantial manners and with many improvements of assured value. Among these are the Whitwell stoves for heating the blast. They are composed of a series of walls and arches of fire brick, so arranged that the gases from the furnaces in passing through them are almost entirely burned out and leave their head in the walls to be again given off when the blast passes through the stoves in a reverse direction.

These works are neuring completion, all the heavy iron work and masonry being completed at present writing, and only the flues, pipes and inclined plane remaining to be erected, so that in four weeks of fair weather all may be in working order.

As experimental tests of the bearing capacity of the soil showed the necessity of piling, it was resorted to for the most important foundation.

The Cleveland (England) Iron Trade

The Cleveland (England) Iron Trade in 1874.

The productive resources of the Cleveland ter and 27 feet long. These piles were 30 feet district have been extended during the past long; when driven, they were cut off 3 feet year to an extent that will bear a favorble comfrom the top, and a grillage of white oak laid parison with any previous period of its history; upon them. This was then filled with concrete and this process of development applies equaland the whole leveled off with a 6 inch laver of ly to the mineralogy as to the metallurgy of the same material. Upon these sub-founda- the district. Since January of 1873, not less tions the foundations in rubble stone, in hard brick and brick arches, were built.

Cleveland, representing, at the very modest The easting house, stock house and engine calculation of £20,000 per furnace, a total capinouse have wide concrete bases under their tal of £340,000, and an increased capacity of subble foundation walls, as also the boiler production to the extent of at least 800,000 tons of pig iron per annum. The total number of furnaces have outer shells of red brick, furnaces now built in Cleveland is 154, as combound by iron bands, inwalls of Laclede fire-brick tiles, bottoms of Stourbridge (English) tiles, and one hearth and bosh, each of Stour- furnaces inoperative. During the past 12 bridge and Mount Savage tiles. Each has two months the Lackenby Iron Company have sets of eight cast iron columns, one for the blown in a furnace near Redca; Bolckow, outer shell, the other for the inwalls. The Vaughan & Company have blown in a furnace Whitwells have easings of good plate iron, and at Eston; Mr. Thomas Vaughan has blown in are built up half of Stourbridge, half of Pacific two new furnaces at South Bank; Messrs. Bell (St. Louis), fire-brick and tiles. The stock Brothers have blown in two new furnaces at ouse has a retaining wall on one side, to re- Port Clarence ; Meszrs. W. Whitwell & Comain the filling about the furnaces on which the pany have blown in two new furnaces at nain smoke flue and the slag track rest. The Thornaby; Robson, Maynard & Company have orth side and the two ends are of frame, and blown in two new furnaces at the Redcar Iron It has a gravel roof in one span of 95 feet. The Works, Coatham; and the Loftus Iron Comfour tracks are carried through it on trestles, pany have blown in one new furnace at Skinso that the ore and coke can be dumped from ningrove. Within the same period Messrs. Robson, Maynard & Company have undertaken The inclined plane starts from the center of the erection of two new furnaces; Messrs. the stock house, and rises to the charging level on two cross beams, supported on columns, all of wrought from. It carries a double track, on on two cross beams, supported on columns, all of wrought from. It carries a double track, on which two four-wheeled cars run, cach carrying four buggles of ore or coke.

These are worked by wire ropes, wound on two drums by two hoist engines, having each two cylinders 12 inches by 18 inches; each engine can be used separately, each can turn both drums, or both may be used jointly. The tracks end on the middle of the bridge between the furnaces, which is 72½ feet long by 18 feet wide, resting on columns in the middle and on the gallery brackets at the ends, and built of wrought iron. A fence 4½ feet high extends around the bridge and galleries, which are 34 feet in diameter.

The casting house is of brick with a corrugated from roof.

The boiler shed is of frame, with a gravel roof; the boilers are 42 inches by 60 feet, made of Hillman's Tennessee charcoal iron. Five batteries of two each are now built, room being left for us many more. Each battery communicates by means of an 8 inch pipe to the 20 inch main steam pipe, from which an 18 inch pipe leads to the engine house, branching there into two 15 inch pipes. The engine house is of brick, with a basement of rubble stone walls, which start with the three engine foundations from a one foot layer of concrete. These

a we center in the very heart of the Cleveland brick, with a basement of rubble stone walls, which start with the three engine foundations from a one foot layer of concrete. These foundations are very solid, built of bard brick in cement and capped by cut Grafton stone.

The three blast engines have each one 38 inch steam and one 80 inch blowing cylinder by 4½ feet stroke, two fly-wheels 14 feet in diameter each, of 10 tons weight. Each engine weights about 85 tons. The roof of this building is in one span and covered with iron.

The smoke stack is of ample du ensions to suffice in case a third furnace were ever added. It rises from a 45 feet diameter concrete bed on the piling, theree 9 feet in three offsets of rubble and one of hard brick in cement, then follows a hollow octagon 15 feet in clear, 5½ feet walls, 13 feet high; then a conical shaft 25½ feet at bottom, 12 feet at top, 180 feet high, expeed by a plain cast iron ring; the walls are four brick at bottom and one brick at top. The lining of fire brick is entirely separate, and 85 feet high.

The daily consumption of these works is estimated at about 160 tons pig iron per day.

They will be completed during the spring of the present year.

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Dr. Kosch, of the Chemical and Technological School at Vienna, has made an interesting discovery, which consists in the fact that certain colors may be made fire-proof, and may thus be prepared for painting on china and other substances in precisely the tones required.

The inventor has prepared a palette on which his colored enamels may be used like ordinary oil colors, and may be painted in every conceivable combination of times without being in the slightest way altered by the action of clerching in the slightest way altered by the action of clerching in the slightest way altered by the action of clerching in the slightest way altered by the action of clerching in the slightest way altered by the action of clerching in the slightest way altered by the action of clerching in the

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Hooks, et logs, while and West, the Chip Licks and Watters, the Gardines of Reines and Watters and Watters and Watters and Watters. NATHAN WEED, 37 Chambers St., New York.



ed,

E. C.

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WRIGHT'S Double Acting, BUCKET - PLUNGER STEAM PUMPS.

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CUCUMBER WOOD PUMPS.

Price List with description sent on application

See wholesale price current in this paper



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FLUTING MACHINES.

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REVOLVING SCRAPER COMPANY Columbus, O

Reasons for Using our Goods.

Hoge when ringed are pro rooting, and fatten quickly."

Pastures and clover fields are kept smooth and are not destroyed by the hogs rooting

Feed lots in the winter are kept smo th, and corn that is otherwise rooted and tramped into the ground is saved.

The Triangular Wire Ring, manufactured only by us, is the only wire ring that can be inserted in the hog's nove with one grin on the Kinger. and is the only ring that will remain in a hog's nose, as it fits close, will not turn in for the joint to irritate the nose, is not liable to be torn out, and heals quick'y.

No puncturing of the no e require I to in-



SOMETHING NEW

We shall this present season make a Heavy Tinned Wire Ring that will not rust in the hog's nose. The strongest

and best ring in the market. Ringers, retail . " per doz..... Rings per box (100) coppered wire. per doz boxes (1900)

per doz. boxes (1200) tinned were 4 00 Tongs or Holders retail per doz. The coppered wire ring will be rent unless otherwise ordered.

per box (100) tinned wire...

Samples by mail postpaid on receipt of retail price.

Goods sent C. O. D. with privilege of ex-

amination before paying charges. Net prices in quantities, circulars and

posters mailed free. Our advertisements are now inserted in over 1800 newspapers, published in every

State of the Union, so that dealers will find alarge demand creeted for our goods.

NICHOLSON

All Nicholson Files are out with the Patent Increment Cut, an invention owned and controled exclusively by us, the file out in this manner being Patented as a new article of manufacture, and differs from all other machine out files (all of which have their teeth cut with equal spaces) by being cut with teeth slightly expanding or increasing in size and space from the point, thus avoiding the too great regularity of teeth common to all other machine cut files. The tendency of all cutting tools with teeth or cutters placed at regular distances from each other may be illustrated (to the machinist at east) by the fluted reamer—as it is well known that if a round reamer be made with (say 12) teeth whose spaces are equidistant, the hole reamed will not be round and smooth, but will approximate to a hexagon in shape. Whereas, if the same number of teeth be made of irregular distances, the hole reamed will be both round and smooth. The same is true of a file, hence the necessity of its having teeth at unequal distances, and to which we have applied the name of Increment Cut File, which possesses all the advantages of hand cut work, and the accuracy and uniformity of machine work. It is now upwards of seven years since this File was introduced to the public, and the demand has increased until our production is undoubtedly treble that of any File manufactory in the country.

We put all files under seven inches in boxes of either one-half or one dozen each. These boxes are neatly arranged, and open on the end, on which the kind is plainly marked with printed labels, acknowledged improvements

The "Increment File" is not an experiment, but an established fact, and already has acquired a legitimate demand or upwards of 500 dozen per day. We employ no regular Travelers, but our goods may now be found in the hands of the principal jobbers and dealers throughout the country.

Prices and terms will be forwarded on application to

NICHOLSON FILE COMPANY.

Providence, R. I.

eor Sale by the Leading Jobbing Hardware Houses of New York, Philadelphia, Baitimore, Cleveland, Columbus, Cincinn Lafayette, Chicago, Milwaukee, Burlington, Davenport, St. Louis and San Francisco.

Pawtucket, R. I.

The American File Company have the exclusive right to use the Bernot process for cutting files By this method all the advantages of hand cutting are secured, together with an accuracy unattainable in hand work. They are the only manufacturers who employ machinery for testing files and steel.

Goods of all known manufacturers have been repeatedly tested, and interesting tables have been compiled showing the working qualities of files made by different makers, and of files made from different steels, and with various shapes and angles of tooth They have thus reduced the manufacture of files to an exactness and perfection with a uniformity of result, as they believe, never before attained. No file, foreign or domestic, that they have ever tested, has equalled the performances of their own goods taken at random from their stock. Their machines are capable of the most delicate adjustment, and can produce the very finest work known to the trade. Special files made to order. Prominent file manufacturers are having their best goods from our works. Price lists and information furnished on application.

AMERICAN FILE CO., Pawtucket, R. I.

AND

XTRA QUALITY,

MADE FROM THE BEST

RASPS.

Auburn File Works, AUBURN, N. Y.

JOHN ROTHERY'S Celebrated Hand-Cut FILES,

Made of Best English Cast Steel.

WALSH, COULTER & FLAGLER. Sole Agents.

MANUFACTURERS OF AMERICAN HARDWARE.

Coes & Tafk's Pat. Wrenches. Mouse Traps. Wire Seives.
Age, Pick, Sledge & Hammer Scale Beams.
Handles.
Handles. Pat. Boot Jacks.
Handles. Pat. Boot Jacks.
Allets. Pat. Boot Jacks.
Almiets and dimiet Bits.
Agegra and Auger Bits.
Shaitack's Platform Counter Scale Beams.
Handles.
Control Tap Borers.
Collars.
Collars.
Boring Machines.
Cost from Hatchers.
Lagers and Auger Bits.
Shaitack's Platform Counter Scales.
Scales.

DEAN'S New Patent (1873) Screening Scoop



SHOVEL

For Coal, Coke and Coal The largest frames are 12 by 18 inches, with seven bars, and are made of the Best Malleable Iron. They are, or can be, wired between bars by an arrangement of holes a quarter of an inch apart, by an ordinary person, to screen any size substance desired. They are warranted to be the most durable and practical Screening Shovel made, or money refunded. Reference—All New York Gas Companies and Hotels. Substances.

A. SEE & SON, N. Y. Shovel Works, Price: Largest size \$30 per doz., and upwards, according to size of

Clement & Hawkes Mfg. Co., Manufacturers of

SHOVELS,

Planters' Hoes, Trowels and Machinery. Northampton, Mass.

chweitzer Mfg. Co. 57 Readn St., N. V. IMPORTERS & JOBBERS. Established 1816.

Frasse

95 Fulton Street, New York,

SOLE AGENTS FOR

Thomas Turner & Co.'s Suffolk Works. SHEFFIELD.

FILES AND HORSE RASPS.

And Importers of

STUBS' FILES, TOOLS & STEEL.

W. J. Davies' Sons' London Emery Cloth, HUBERT'S FRENCH EMERY PAPER.



PENNSYLVANIA FILE WORKS.



McCAFFREY & BROTHER. Manufacturers of FIRST QUALITY FILES and RASPS ONLY, Nos. 1732, 1734 & 1736 North Fourth St., Philadelphia, Pa.



ERIE .awn Mower

For 1875.

PERFECTED WITH

ADJUSTABLE CUT.

Manufactured by

H. M. REED & CO. Erie, Pa.

Send for Circulars and Price List.

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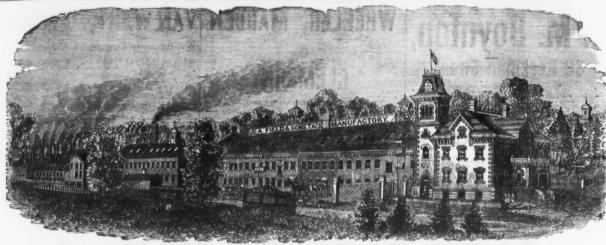
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A. FIELD & SONS.

TAUNTON, MASS., Manufacturers of

Copper and Iron Tacks, Tinned Tacks,

SUPERIOR SWEDES IRON TACKS, for Upholsterers' Use, Saddlers' Supply, Card Clothing, etc., etc.

American and Swedes Iron Shoe Nails,

Zinc and teel Shoe Nails, Carpet, Brush and Cimp Tacks, Common and Patent Brads, Finishing Nails Annealed Trunk and Clout Nails, Hob and Hungarian Nails,

Copper and Iron Boat Nails, Paten Copper Plated Tacks and Nails Fine Two Penny and Three Penny Nails, Channel, Cigar Box and Chair Nails, Leathered Carpet Tacks, Glaziers' Points, etc., etc.

OFFICES AND FACTORIES AT TAUNTON, MASS.

WAREHOUSE AT 35 CHAMBERS STREET, NEW YORK, where may be found a full assortment of Tacks, Brads, &c. for the accommodation of the New York Wholesale and Jobbing Trade.

Any variations from the regular size or shape of the above named goods made from samples, to order.

Hopkins & Dickinson Manufacturing Co., FINE METAL WORKERS.

69 Duane Street, N. Y.

Works, Darlington, N. J.

NEW AND ARTISTIC DESIGNS FOR

Private Residences, Banks, Churches and Public Buildings.

THE CANADIAN BANK OF COMMERCE.

Capital - - \$6,000,000, Gold. Surplus - \$1,800,000, Gold.

The New York Agency, 50 Wall St., Buys and sells Sterling Exchange, makes Cable Transfers, grants Commercial Credits, and transacts ther Banking Business.

J. G. HARPER, Agents.

Gold Medal a Md. Ins. Exposition, Oct. 1874. Endless-Lever House & Weight Mover.



THE REAMY TRUCK CO. of Baltimore, Md.

OR HOTELS, OFFICE BUILDINGS, STORES, WAREHOUSES, FACTORIES, MINES, BLAST FURNACES, &c.

OTIS BROTHERS & CO. SOLE MANUFACTURERS, 348 Broadway, New York.

CROCKER BROTHERS.

32 Cliff Street, N. Y.

METALS.

Anthracite Pig Irons, COLD AND WARM BLAST CHARCOAL IRONS,

American and English Bessemer Irons, Iron Ores.

COPPER, TIN, &c.

Advances made on Merchandise.



BUSINESS ITEMS.

PENNSYLVANIA.

The Lehigh Valley Brass Works, Bethlehem, nanufacture globe valves, steam cocks, steam whistles, oil cups, gauge cocks, etc. The main building is 80x55 feet, two stories. In the rear s the foundry building, containing three furaccs and the necessary appliances for casting he brass work. The capacity of the works is wo tons per month of brass and copper work, alued at \$6000 to \$7000.

The Millerstown Iron Co.'s furnace is now orking satisfactorily, though it is not making he same amount of iron as previous to their reert accident.

The Harrisburg Putriot says that the puddlers n the rolling mills there are now receiving from \$4.10 to \$4.50 per ton, a reduction of 90 ents in their wages having taken place recent-Since the panic the price for making a ton of puddled iron has fallen from \$7 to the above figures. The highest ever paid was \$8:10.

The Reading Company, at their new rolling mill in Reading, have about 7000 tons of new rails on hand.

NEW JERSEY.

The establishment of John A. Roebling's pany. Son's, at Trenton, the largest wire rope manufactory in the world, was established in 1847 by the late John A. Roebling. The buildings consist of main mill, rolling mill, galvanizing shop, carpenter shop, pump house, office building and stable-all of immense size. The machinery is driven by engines whose combined capacity is 600 horse-power, the largest being 250 horse-power, and having a fly-wheel 24 feet in diameter. Their specialty is wire rope, although they manufacture merchant wire for the trade, telegraph wire, fence wire and wire rods. The colling mill has a capacity of 9000 tons per annum. Skilled workmen are employed to the number of 350, and the business done is over \$1,000,000 per annum.

An iron firm at Trenton are preparing the maerials for an iron bank building which is to be rected at Port au Prince, Hayti.

The works of the Phillipsburg Mrg. Co., at Phillipsburg, are running on full time, and employ about 250 men. Beside bridges, the company manufacture bolts, nuts and special

CONNECTICUT.

The Hill's Archimedean Lawn Mower Company, at Colt's Armory, Hartford, is out with new patent. The new lawn mower, called the Charter Oak, is an improvement on its predecessor, the Archimedean, especially for mowing the corners of lawns.

Messrs. Hotchkiss' Sons, manufacturers of eurry combs, traps and bow pins, at Bridgeport, are just fitting up their office in fine style in the new factory they have erected on the outskirts of that thriving city.

The Bridgeport Electro Casting Company has made arrangements with Mr. Frederick A. Taft, manufacturers' agent at Bridgeport, to repreent them near the depot. The company turns out a handsome, solid and cheap style of door ago, the well known Mr. Barnum being a shareholder in the concern, which promises to become a most prosperous one.

There is to be a new joint stock company at Painville, known as the Kennedy Manufacturing Company, which is to engage in the manufacture of iron bolts. Mr. H. D. Miller is to be the superintendent.

MAINE.

A company has been recently organized at Rockland under the name of the Knowlton Platform and Car Coupling Company, for the purpose of manufacturing platform and car couplings, and selling licenses to use the same, inder letters patent issued to C. H. Knowlton, dated November 26, 1872, and April 1, 1873. Its capital stock is \$50,000, in shares of \$100 each, and is all paid in

14,650 tons of rails the past year, which, at \$60 the world, except one in Germany. The total a ton, would amount to \$879,000.

The iron foundry, at Farmington Falls, is in full operation.

is at Nashua. Cost \$75,000. Weight of iron in the machine, 200 tons; weight of ram, 12 tons; striking force, 100 tons; the engine stroke, driving a 35 ton balance wheel; a 20 inch which works it is 600 horse-power.

MASSACHUSETTS.

The brass foundry of C. J. Donovan & Co., Boston, was totally destroyed by fire recently. There were two buildings, one used for casting, and the other for finishing, both valued at purchased the royalty of Sax & Kear's patent \$6000. Some \$10,000 worth of stock was also steel tire, to be used on car wheels, and have

DELAWARE.

Wilmington, are running but three days each week, and confining the work exclusively to orders. The works are owned by Messrs. Seidel & Hasting, who manufacture plate iron of all descriptions, from ½ to 1½ in. in thickness, for boilers, iron ships, iron bridges, oil and water tanks, and all the various purposes for which iron plates are used. The works were greatly enlarged and improved a few years later. The new mill was erected in 1860. The capacity of the works, the control of the works were the capacity of the works, were the capacity of the works were the capacity of the works, with the capacity of the works, we capacity the works were the capacity of the works. at present operated, is 3000 tons of plate iron, and about 2000 tons of blooms annually, workand about 2000 tons of blooms annually, working in day time alone. The mills give employment to about 110 hands. There are two large engines for driving the roll trains, and three smaller ones for driving the shears, of which there are nine pairs capable of shearing plates there are nine pairs capable of shearing plates from the control of the care and St. Louis Raifroad, which was completed on the 20th ult., over 2000 tons of 46-pound iron rails and fastenings. from 1/2 to 11/2 in., cold. Another engine drives the forge. The steam which moves the engines is generated in four large boilers. There are also two steam hammers for making fire box iron, and one trip hammer for hammering the blooms.

Here are the state and the service of from bridge works at Leavenworth, that city having agreed to give them a certain amount of work yearly for several years.

The Fort Scott Foundry is manufacturing

A plate and boiler fron mill has recently been stoves.

rected by the Christiana Iron Company, at Wilmington. Owing to scarcity of orders it has not as yet been put in operation.

ощо,

The Furnace and Rolling Mill of Wm. Richards & Sons, Warren, suspended operations on the 9th, the immediate occasion of which was a strike of the puddlers, who were not willing that the firm should ship the muck bar to Pittsburgh. The liabilities of the concern aggregate \$250,000, \$75,000 of which is in the shape of a mortgage upon the furnace property. The rolling mill is mortgaged for \$15,000. The remainder of the liabilities are unsecured. The assets consists of one rolling mill, one blast furnace, and about 2000 tons of ore. It is hoped that satisfactory arrangements will be made for the speedy resumption of the works.

Application has been made to the secretary, for a certificate of incorporation of the Falcon Iron and Nail Co., Niles. The capital stock is \$13,000, full paid. The incorporators and stockholders are Wm. Ward, T. K. Hall, F. O. Arms, Evan Morris, K. S. Walker, O. Shindle and Ambrose M. Robbins. The latter gentlemen will be the business manager of the com-

At the annual meeting of the American Tin Plate Company, of Millsville, the following persons were elected officers and directors Alex. Smith, president; Francis Elkin, vice president; J. G. Bright, secretary and treasurer. Directors-Alex. Smith, C. E. Marchand, Francis Elkin, John Felter, Wm. Armstrong and D. Morgan,

Negotiations are being made for the erection of a forge for the manufacture of muck fron at Monitor Furnace. - Ironton Democrat.

Among the dividends declared this year by our manufacturing establishments are the following: Tiffin Agricultural Works, 10 per cent. dividend and 5 per cent. reserve; Ohio Stove Company, 10 per cent. dividend; Tiffin Shoe Factory, 6 per cent, dividend for 6 months. We believe no town in the State can make a better showing than the above. It is especial. ly good considering the depression of business during the past year .- Tiffin Tribune.

Both the rolling mills at Portsmouth are at

B. F. Remick & Co., proprietors of the Aldine printing press works, at Canton, have a building 300x60 feet, with an addition on the east of 25 feet, two stories high, of brick, with two side buildings, 40 feet square each. The business was established in 1873, for the manufacture of the Aldine presses, by which three colors are printed at once. They also make presses for printing one color, but the Aldine is their specialty. The shops employ from 90 to 100 men. Parties in England have offered the firm \$40,000 for the privilege of manufacturing the Aldine presses there, but the offer has been declined, the company being unwilling to give the right for less than \$50,000.

The Belfont Iron Works Co., it is stated, has recently purchased about 200 tons of charcoal mill at \$22 per ton, for the purpose of making knobs, etc., made of real bronze, silver and nickel plated, having been founded two years the mill for three weeks, at the end of which time the company will either purchase more iron, start the furnace or stop making nails .-Ironton Democrat.

The Massillon Rolling Mill has been leased by Messrs. Taylor, Pond & Mitchell for a term of five years from the 1st inst., at \$4000 per year. It will be put in operation at once. Extensive additions will be made to the machinery and a large force put to work.

One of the Valley Rolling Mill puddling furnaces, at Youngstown, one day recently, produced at one heat 2205 pounds of castings.

Bids for an iron bridge across the Ohio, at Cincinnati, were advertised for by the Cincinnati Southern Railway Company. The lowest bid was \$593,000, made by the Watson Bridge Company, of Paterson, New Jersey. The bridge is to consist of five spans, including a channel The Portland Rolling Mills manufactured of 519 feet, which is the largest single span in length of the bridge is to be 1597 feet.

At the Ashtabula Rolling Mill the manufactures consist of sheet and plate iron, wrought NEW HAMPSHIRE.

The largest trip hammer in the United States

The building is 100x126 feet, 20 foot posts, with from 11/2 inch plate to No. 32 wire gauge. There are also two spike machines and one shingle band machine.

The St. Louis Car Wheel Company have lately made a practical test of welding the tire onto the iron flange of the wheel. The operation The Wilmington Plate Iron Rolling Mills, at was performed in the presence of several rail-Wilmington, are running but three days each road mechanics and others interested, and was

ILLINOIS.

The North Chicago Rolling Mills, after clos

KANSAS.

Messrs. Farnsworth & Eaves are about to be-

GEORGE GUEUTAL & SON,

39 West 4th St., New York.

Wood Screws, Steel in Sheets,

BAND SAWS, TOOLS FOR BRAZING, &c.

Bed Screws, Pin Hinges, and Wire Nails a Specialty.

Elliptic Forked Saw Frame.

Patented June 28th, 1870.

The annexed engraving represents my ELLIPTIC FORKED SAW FRAME, which commends itself to the trade for its simplicity of construction. The Forked Brace being all in one piece, without any center bolt, secures for the Frame great strength and durability. These Frames are put up with my best Webs, marked "No. 40, Harvey W. Peace." Patented June 28th, 1870.

HARVEY W. PEACE, **VULCAN SAW WORKS.**

DIAMOND CROSS-CUT SAW.

\$1.50 Per Foot.



Patent Secured

THIS new Saw, which is destined to take the place of all Cross-cut Saws in point of SPEED AND EASE, is manufactured by E. C. ATKINS & CO., Indianapolis, Ind., who are the SOLE MANUFACTURERS FOR THE UNITED STATES.

So confident are we that this is the best Cross-cut Saw in the market that we CHALLENGE THE WORLD. Orders promptly filled.

E. C. ATRINS & CO.
Saw Manufacturers and Repaires, Indianapolis, Ind.

Lloyd, Supplee & Walton, HARDWARE

MANUFACTURERS OF

Bonney's Hollow AUGERS.

Stearn's Hollow Augers

and Saw Vises

Bonne's Spoke Trimmers Double Edge Spoke Shaves

Adjustable Gate Hinges

Scandinavian Pad Locks

Flat Ke" Brass and Iron Pad Locks, &c., &c. 625 Market St., Phila., Pa.

COLUMBUS BOLT

Manufacturers of BEST NORWAY IRON

Carriage, Steeple, Cone, Shackle, Elliptic, Shaft and Tire



ers of the finest Carriages. Every Bolt warranted true to size in. Our facilities are unsurpassed for the manufacture of respondence from Car, Bridge and Machinery Builders solicited Branch Office & Warrenoms, 35 Murray St., N. V.

E. M. Boynton,

80 Beekman Street, NEW YORK.

Saws of all kinds.

LIGHTNING SAWS.



lined on MI tooth.

Telegram Dated Oct. 1st, 1874. STATE FAIR, EASTON, PA. To HENRY DISSTON & SONS:

Philadelphia, Pa. I want you to publicly test that challenge on Cross Cut Saws. Name time and place within thirty days. American Institute preferred.

E. M. Boynton gave on Wednesday of last week in exhibition of what his Lightning Saw could do at the Pennsylvania State Fair, in which two men sawed through a sound oak log, 16 inches in diameter, in 17 seconds. Mr. Boynton informs us that his export trade is increasing, he having lately made large shipments of his saws to Australia and other distant markets.—The Iron Age, Oct. 8, 1874.

For fuller report of this exhibition see the Easton Morning Dispatch of Oct. 1st, 1874.

Henry Disston & Sons cannot furnish Lightnin



FACTORS. Putnam's Government Standaro FORGED

HORSE SHOE NAILS

Manufactured from the best of NORWAY Iron nd warranted to give entire satisfaction

S. S. PUTNAM & CO., NEPONSET. MASS.

Rogers' Self-Sharpening HOE.

The best Hoe in market. It will not batter or break. Wears itself sharp. Will last twice as long as any other Hoe, and is warranted to cut the "Bolles Hoe" or any Hoe in market.

For Sale at Manufacturers' Prices by RUSSELL & ERWIN MFG. Co., - - New York. BYRNE & FITZSIMONS, - - - Albany, N. Y. KENNED SPAULDING & Co., - - Syracuse, N. Y.



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in the world Hardware, House-furnishing and Crockery dealers

can find no more salable article, as this Filter is perfect in its work of purifying water of every kind, attractive in appearance, &c., &c. Send for illustrated circular. Manufactured only by

J. FLINT & CO.,

Manufacturers of all kinds of SAWS and PLASTERING TROWELS, Rochester, N. Y.

A large Stock of Cross Cut Saws constantly on hand. Orders filled promptly. District's Double Handle One Man Cross Cut Saw made with any kind of tooth desired. Our patent method of grand by Rand Saws makes them superior to any in the market. Send for illustrated Price List.



CLEMSON,

of every description, including

Circular, Shingle, Cross Cut, Mill, Hand, Roberts' and other Wood Saws, &c., &c

Cast Steel Files

Wheeler, Madden & Clemson. FACTORIES:

Middletown, Orange Co., N. Y. BRANCH OFFICE:

97 Chambers Street, New York.

BRUNDAGE FORGED HORSE NAILS.

BEST NORWAY IRON, by BRUNDAGE & CO. Sold by WHEELER, MADDEN & CLEMSON Middletown, Orange Co., N. Y.



I make a specialty of the LARGEST SIZES of Circular Saws, and call particular attention of lumber manufacturers to the fallowing points of excellence: Kyenness of Temper.—The peculiar structure of my furnace subjects all parts of the saw to a DEAD beat, and when dipped in the oil bath secures perfect uniformity.

uniformity.

Perfect Accuracy in Thickness.—My saw
re ground on a patent machine, automatic in_its
peration, grinding off the thick places upon to
late before the thinner parts are reached, and when
he saw is removed BALANCES PERFECTLY, which
proof positive of the right accomplishment of the

Properly Hammered.—Great care is taken that o saw shall leave my works without due attention a this important particular. A saw too tightly trained upon the rim, or too loose in the center, anot be successfully run—hence the importance of so hammering the saw as to effect equal strain all its parts, and at the same frum RUN TRUE, his department is under the personal supervision of yeelf, who has devoted over twenty years to the art saw making.

I am soie proprietor and manufacturer of the celebrated "Challenge" Cross-Cut Saw. Price List of all kinds of saw sent on application. JAMES OHLEN.

V. G. HUNDLEY, NORTH CAROLINA HANDLE CO.,

XE, PICK, GERMAN & AMERICAN SLEDGE, and other Handles.

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Hardware Commission Merchants, BIRMINGHAM, - ENGLAND,

VAN WART & McCOY,

184 & 186 Duane Street, N. Y. George H. Gray & Danforth,

48 India Street, Boston. F. W. TILTON, 17 Old Levee Street, New Orleans

At each of these places a complete assortment of samples of Hardware and Fancy Goods will be found, including all new descriptions. Sole Agents for John Himmer & Son's Celebrated Harness and other Needles,

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SCHOLEFIELD, GOODMAN & SON.

(Formerly JOSHUA SCHOLEFIELD & SONS.) GENERAL

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New York-Edward Frith, 16 Cliff Street. Boston-H. L. Richards, 18 Batterymarch,

New Orleans-R. Rhodes, 71 Camp Street. Montreal-J. J. Evans 14 St., John Street

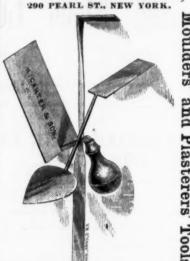
JOHN MAXHIEM.

Patented. lune 3, 1862; April 6, 1860 Dec 23, 1878 Jan. 20, 1874. FULL SIZE OF

PATENT EUREKA Bright Metal BIRD

NEW YORK. H. CARTER,

Nos. 247 & 249 Pearl Street



Manufacturers of and Dealers in all descriptions of oulders' and Plasterers' Tools, and Dealers in General Hardware, Gilded Copper Weather Vanes. ARTERS' PATENT CARRIAGE LIFTING JACK. &c.

Backus's Patent Bit Brace



Cutlery.

John Russell Cutlery Co.,

TURNERS FALLS, MASS.

Manufacturers of

TABLE CUTLERY, Butcher, Painters' and Druggists' Knives

Extra Hard Rubber Handle Table Cutlery of our own Manufacture. Fine Ivoride Handle Table Cutlery, very White and Durable.

Sample Office, 77 Chambers St., N. Y. NORTHAMPTON CUTLERY CO.,

American Table Cutlery.

Cook, Butcher, Shoe and Hunting Knives. Sole Agents for Rogers' Cutlery Co. D. P. GRIFFITH, Manager, 45 Murray Street, N. Y.

FRIEDMANN & LAUTERJUNG,

Pen and Pocket Cutlery, Solid Steel Scissors, F. & L. Shears, Razors, Russia Leather Strops, Oil and Water Hones, &c.

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Also Agents for the BENGALL RAZORS.

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PETERS BROTHERS.

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Plasterers

JACK. &

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American, German, English Pen, Pocket & Com-

bination Knives.

Scissors Scissor Cases Razors, Hones, Strops, &c.,

Heinisch Tailor Shears, &c., 88 Chambers Street, New York.

TABLE KNIVES AND FORKS OF ALL



And the "Patent Ivery" or Celluloid Knife. These Handles never get losse, are not affected by hot water, and are the most durable knives known. Always call for the Trade Mark "MEHIDEN CUT-LERY COMPANY" on the blade. Warranted and sold by all dealers in Cutlery, and by the MERIDEN CUTLERY CO., 49 Chambers Street, New York.

THE MILLER BROTHERS CUTLERY CO., PATENT FINE PEN & POCKET CUTLERY

WEST MERIDEN, CONN.

The only Knives made that are put together in such a manner that there is no strain on the ering or frail part of the knife. We warrant our knives equal in cutting qualities and workmanship to made, and are acknowledged by English makers as the Best American Knife. We also make

NICKEL & SILVER PLATED POCKET KNIVES which will not rust or become discolored when used as a Fruit Knife, and their cutting qualities are equa to any other knife. Orders filled from the factory or by

J. CLARK WILSON & Co., 81 Beekmas Street, N. Y.



BUCK BROTHERS, Millbury, Mass.

The most complete assortment in the U. S. of Shank, Socket Firmer, and Socket Framing Chisels.

PLANE IRONS. Gouges of all lengths, and circles beveled inside or outside. Nail Sets, Scratch and Belt Awis, Chiscl flandles of all kinds. Orders filled promptly; generally same day as received.

ESTABLISHED 1852.

NEW YORK KNIFE CO. MANUFACTURERS OF SUPERIOR

Table & Pocket Cutlery,

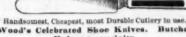
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WALKILL RIVER WORKS.

Walden, Orange Co., New York.

THOS. J. BRADLEY, President.

Wood's Hot Water-Proof Table Cutlery-



Wood's Celebrated Shoe Knives. Butcher Knives a specialty. WOODS CUTLERY CO., Antrim, N. H. 4. CLARK WILSON & CO., Agents, 81 Beekman St., N. Y.

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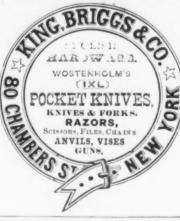
ted Pen and Pocket Scissors, &c. SPECIALTIES :



AMERICAN PEN AND POCKET KNIVES,

Aaron Burkinshaw. AB MASSACHUSETTS, My Blades are forged from the best Cast Steel, and warranted. To me was awarded the Gold Mital of the Connecticut State Agricultural Society; also a biest and Diplema from the Mass Mechanics' Ass'n Sept. 1981.

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italiroads and Switches. Also, Patent Stationary R. R. Car Door Locks. Patent Pian and Sewing Machine Locks. 141 to 145 Railroad Avenue, NEWARK N.J.

Patented Steam and Hydraulic, April 1, 1868



destined beyond question to be the site of numerous extensive works for this specialty. In confirmation of these statements, it is esecially aggreeable to announce the establishment of a new iron ship yard on the Delaware, although we must confess to some remissness not baving noticed the fact earlier in the year. The new works is entitled the New York and Philadelphia Engineering and Iron Ship Building Works, is located at Bordentown, N. J., 27 miles above Philadelphia, on the Delaware River, and is conducted by the firm of Holmes, Shaw, Brown & Co. I have not yet had an opportunity of inspecting the plant, but learn it is thorough in all respects, and from personal knowledge of the character of the proprietors can confirm this statement. It was formerly quite customary for mechanical firms in all branches to prefix their title with the word "practical." This is peculiarly applicable to the firm in question, since Mr. Samuel Holmes, the senior partner, served a thorough apprenticeship to iron shipbuilding in one of the largest establishments in Great Britain, renaining with the firm ten years. In 1870 he constructed an iron ship at Quebec, under contract with the Canadian government, after which he came to Philadelphia and was employed up to the closs of 1874 with the well known ship building firm of Neafle & Levy, at the Penn Works, as superintendent of their iron ship building department. Mr. Holmes is further entitled to notice as the author of a valuable contribution to the science of the ship building. ontribution to the science of non ship building, in a communication read before the Franking, in a communication read before the Franklin Institute in 1873, on the subject of longitudinal framing. The Mr. Shaw of the firm is
well known here as a thorough engineer, for
eight years past superintending engineer for S.
& J. M. Flauagau's line of stram towboats, and
also in the same capacity for the Southern Mail
Steamship Company. Mr. Brown, for ten years
an engineer in the United States nayy, has since
here engaged as constructing engineer and been engaged as constructing engineer and boiler builder in his own name. The firm starts under favorable ausplees, having orders on hand for engines and boilers for Cuban account, hand for engines and boilers for Cuban account, and a contract for the construction of an iron river steamer of some size. They are further prepared to construct vessels up to 2500 tons burden. To that portion of the iron trade, and it is rapidly growing larger, about adopting the Whitwell fire brick hot blast, it will be interesting to state that the new firm will shortly be charged with constructing the valves, fron tackets and general iron work connected with ackets and general iron work connected with jackets and general from work connected with this stove, and will erect a shop purposely for this work. As Mr. Holmes is thoroughly familiar with the construction of these stoves, coming from Stockton on Tees, the location of the works of Wm. Whitwell & Co., and more over enjoys the entire confidence of the patentee, Mr. Thomas Whitwell, and his agent in this country, Mr. Wm. M. Bowron, furnace owners adopting this hot blast will not be subjected in the future to the inconvenience and difficulty hitherto felt in obtaining the iron work properly In the future to the inconvenience and difficulty hitherto felt in obtaining the iron work properly constructed to the patentees specifications. It is but fair to Mr. Holmes to add that under his superintendence was built last spring the steel torpedo boat Ærolite, for the Khedive of Egypt, which boat made the extraordinary speed of 25 miles per hour on her trial trip. In addition to their works, the firm have a city office at 426 Walnut street, Philadelphia, in connection with the office of the Whitwell hot blast, thus combining the somewhat diverse industries of ship building and blast oven construction.

Wainst street, Philadelphia, in connection with the office of the Whitwell hot blast, thus combining the somewhat diverse industries of ship building and blast oven construction.

The items for the week are of some interest. Quite a commotion was created by a rumor that the Senate committee on navy yards had recommended the abolition of our League Island navy yard. Subsequent information not only proveds this incorrect, but that the committee recommended an appropriation to fit out this yard in the most thorough manner, with a view of consolidating some of the Eastern navy yards here. Referring to the forthcoming petition to the control of the provided an appropriation to fit out this yard in the most thorough manner, with a view of consolidating some of the Eastern navy yards here. Referring to the forthcoming petition to the control of the provided an appropriation to fit out this yard in the most thorough manner, with a view of consolidating some of the Eastern navy yards here. Referring to the forthcoming petition to the country of the provided an appropriation to fit out this yard in the most thorough manner, with a view of constituting some of the Eastern navy yards here. Referring to the forthcoming petition to the country of the provided an appropriation to fit out this yard in the most thorough manner. With a view of constituting some of the Eastern navy yards here. Referring to the forthcoming petition to the country of the safety of the company for some three acres in extent, and offers all necessary facilities for the storage of pig yre.

Great inconvenience, danger to travel, and numerous accidents have for some years occurred from the running of the tains of the Philadelphia and the company for some time, and a plan of relief now adopted, which includes some englueering features of interest. The subject has been under discussion by the city authorities and the company for some time, and a plan of relief now adopted, which includes some englueering features of interest. The subject has been under d

EAGLE PACKING,

Of various sizes for ENGINES and PUMP4, manufactured by JAMES GLANDING & CO., No. 115 Queen St., Philadelphi. What the proprietors ciaim for the Eagle Packing: 1. Its general adaptation to all purposes for which packing is used. 3. Its cheapness. It can be furnished to the consumer at a lower rate than any other packing the consumer at a lower rate than any other packing some admitted on complimentary tickets issued.

PHILADELPHIA, Jan. 25, 1875.

The slight improvement noticed in general business in my last has been steadily increasing, until for the week under review we have a really fair trade to note, and a very much better feeling shown than has been visible for months. Not only is this improvement noticeable in the demand for and prices of pig iron, but it has extended to several kinds of manufactured iron and machinery, and already orders are coming in for both, which indicate a busy summer.

The Iron Age, and especially this correspondence of it, has always been prompt to publish every item of interest connected with iron shipbuilding in our country. We have stood by the industry in both dull and prosperous times, and always endeavored to compel the acceptance of the truth, that the Delaware River was destined beyond question to be the site of numerous extensive works for this specialty.

To the press, and to others whose liberality it was desired to recognize. Making due allowance for these, it may be said that the exhibition was visited by one-third of our population. The number of exchibition, many of them covering numerous items and large displays, was 1251. The number of steam boilers in operation was 9, of 316 horse-power in the aggregate, consuming 267 tons of coal. There were three steam engines driving pumps, and 11 driving particular machines. The whole number of machines in motion was 281. The net profits of the exhibition are expected to foot up \$52,171.66. A full pamphiet report of this, including the awards, will shortly be published. Professor Robert E. Rogers and Bloomfield H. Moore, Esq., were elected president and vice president, and Mr. J. B. Knight, secretary. To the latter gentleman the success of the exhibition was larrely due. It is to be noted that the Institute has awarded to the Harrison safety belief a silver medal for "the best evaporative efficiency, best economical capacity for generating steam, and best dynamic value of steam."

Our annual statement of foreign imports

steam."

Our annual statement of foreign imports shows the total value of iron imported (all kinds) for 1874, at this port to have been \$520,617 only. Trade appears to be fairly launched for the season, and we need no further complaints of dull times.

Nail Puller.

We show in the accompanying illustration a new nail puller manufactured by the Union Hardware Company, No. 120 Chambers and 50

> Warren streets. New York. It is a very strong and simple tool, and cueap in price. The manufacturers announce their intention to use the best materials, and to furnish an implement that shall be cheaper than any other nail puller. and equally effective and durable. Its construc-

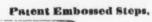
tion and operation are so clearly shown in the illustration that no description is necessary

The Blochairn Iron Company .- A correspondent forwards the following information, which affords a tolerably accurate idea of the troubles which have lately overtaken concerns floated high and dry by the flood tide of prosperity, and left on the rocks by the ebb-the very low ebb--to which trade has now descended: "The directors of the Blochairn Iron Company, limited, in their capacity of liquidators, have issued a report to the shareholders and creditors of the company, it being believed that they have been led to do so by the action that has been taken by a large number of the shareholders for baving them superseded by an official liquidator. When the company found themselves n difficulties, the shareolders were startled by the information that, in the course of eleven months. the company had sustained

	Great Britain			anized in
		of Capital	Capital effered.	Deposits.
	Mfg. & Trud-	. w manners on		Deposits.
	ing 6	1 £10,080,005	£6,188,500	£2,268,900
	Railway	8 4,760,000	4,010,000	707,500
	Investment.	7 4,685,000	2,929,480	523,380
	Banking	3 3,000,000	1,750,000	250,000
	Colliery 1		1.442,500	563,500
	Insurance	4 1,110,000	555,000	82,500
	Financial	2 1,100,000	1,050,000	270,000
	Mining 1		291,000	147,000
	Shipping	2 700,060	450,0:0	102,500
	Waterworks.	3 630,000	570,000	155,000
	Telegraphs	2 630,000	481,000	144,000
	Tramways	1 200,000	200,000	40,000
١	Gas	3 174,000	124,000	87,000
	Hotel	1 10,000	10,000	6,000
ı	Micellancons	5 1.145.000	462.000	163 600

oilwaye oiheries nvestment lanufacturing & Trading las as as anking inancial	2,265,000 2,000,000 849,750 435,000 270,000	Capital called up £14,415,53 2,065,00 1,450,00 746,78 91,50 45,00 831,25
Vater hipping	\$29,600	\$17,60 100,00
elograph	100,000	90,00
tining	. 35,000	7,75 1,096,97
Totals	£95 (94 900	£30 pgg 80

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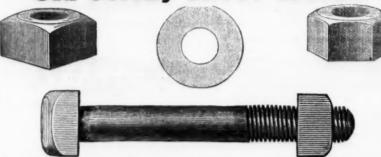
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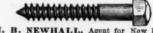
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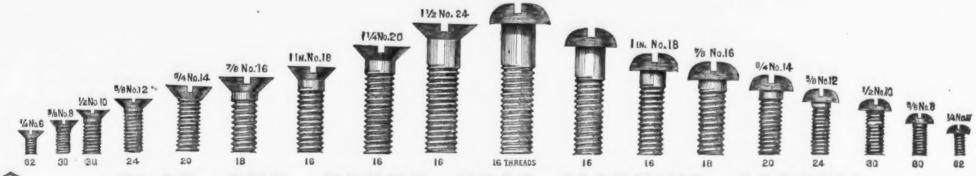
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The Iron Age.

New York, Thursday, January 28, 1875.

DAVID WILLIAMS - Publisher and Proprietor JAMES C. BAYLES - Editor. JOHN S. KING - - Business Manager.

NEW YORK, January 2, 1875.

Until the 1st instant the postage on newspapers was paid by subscribers at the office where the paper was received, the yearly rates on the different editions of *The Iron Age* being as follows: Weekly, 40 cents; Semi-Monthly, 40 cents; Monthly, 24 cents.

Under the provisions of the new postal law, which went into effect on the 1st instant, prepayment at the office of mailing is required, at the rate of two cents per pound for the Weekly, and three cents per pound for the Semi-Monthly and Monthly, which will make the postage as follows on the different editions: Weekly, 50 cents; Semi-Monthly, 30 cents; Monthly, 15 cents.

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	I	aclud	lin	g	1	Po	osta;	Ge.					
То	Wee	kly.			8	le:	m1-3		thl	y		Mon	thly.
Canada	\$4	50					\$2	30				\$1	15
Great Britain.	6	00					3	00				1	50
France		00					- 3	50				1	75
Germany		00					- 4	00		0		2	00
Prussia		00				۰	- 4	00		0		2	00
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Britain and France, 25/; Germany, Prussia and
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orders for advertisements, for which they will give
prices on application.

City Subscribers will confer a favor upon the Publisher, by reporting at this office any delinquency on the part of carriers in delivering The Fron Age; also, the loss of any papers for which the carriers are responsible. Our carriers are instructed to deliver papers only to persons anthorized to receive them, and not to throw them in hall ways or upon stairs; and it is our desire and intention to enforce this rule in every unstance.

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Dent Counties, Missouri.

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Twenty-seventh Page.—New York Wholesale

American Car Wheels for English Railways.

dents and injuries to passengers carried on admitted of a good chill, and, when propthe railways of Great Britain, with those erly secured to the axle, possessed great on American roads, shows that we are con- strength. In 1847 the late Asa Whitney, ducting the travel on our railroads with of Philadelphia, introduced a single plate greater safety to life and property than is wheel with corrugated plate and the patbe found, probably, in the more progress- trace the various improvements and innoive spirit of American railway managers vations in the manufacture of wheels would in adopting new contrivances for the safety require too much space. The producof life and property as the best means to- tion of car wheels in this country has now ward the financial profit of their undertak- reached, in prosperous times, some 700,000 ings. The report of the Philadelphia and annually, consuming over 150,000 tons of Reading Railroad Company, lately publicon, a portion of which is old wheels re- call hard pan. Like them, we must accept Profiting by the experiences of other nalished, shows that nearly seven millions of melted, but the immunity from accident in as philosophically as may be, the reaction tions, we may hope to avoid the mistakes passengers were carried by that company their use is due to the almost exclusive use which follows the artificial and, to a great and delays which have marred the success during 1874, without injury to any by fault of cold blast charcoal iron which possesses extent, delusive prosperity incident to a of previous international exhibitions. We or negligence of the company. This is an the property of chilling at the surface. season of speculative excitement. The understand that the applications from in-

know, unequaled by the returns of any in the web or disc of the wheel, while of the late improvements in controlling use of wrought iron or steel. the speed of trains, as by the power brake; in lessening the danger of derailand in the substitution of iron for wooden bridges.

Another, but less frequently noted safeguard against a different character of accidents, is the general use in the United States of the cast iron wheel with chilled tread. This article of railway carriage construction, almost unknown in Great Britain, has greatly added to the security of railway travel in this country, and deserves the attention of the English companies. The late railway accident near Oxford, on the Great Western Railway of England, by which over a hundred persons were killed or badly injured, was due to the bursting Trade Reports for the week, brought up to the close of business on the previous day.

\$4.50 a year. of a tire on a wheel of the type most generally employed abroad. Such an accident is now very rare with us from any cause. and almost unknown from the break age of wheels under passenger cars. follows such a disaster abroad, one writer to the London Times calls the attention of that journal to the "better things" in use on American railways, among which he enumerates, first, cast iron "tireless wheels" for railway carriages; second, a system of continuous brakes under control of the engineer, and, third, commodious and comfortable drawing room and sleeping carriages. Of the American wheel he

says:

Notwithstanding the repeated endeavors to obtain the ear of English railway engineers of weight, with a view of their trying to get the cast fron wheel adopted in England. I have in each case failed. As a rule, the chief objection given has been that cast fron wheels would not suit our climate, where the changes of temperature are so frequent and sudden; and other objections, equally fallacious, have been urged. The fact is, the changes of temperature in the United States are far more frequent and far more sudden than with us.

My object, sir, in addressing you is to urge you to exert your powerful influence to get the directors, managers and engineers of our railways to pull the scales of prejudice from their ways to pull the scales of prejudice from their

ways to pull the scales of prejudice from their ways to pull the scales of prejudice from the seves and condessend to try, with view of adopting, the cast iron tireless wheel of the Americans, and thus, humanely speaking, save themselves and the country from such wholesale catastrophes as that of the Shipton massacre.

It is presumable that, under the pressure of public opinion, as expressed through the leading journals of England-even so very conservative a body as a British railway board might be induced to adopt the American cast iron wheel. In this direction lies the development of a very important export trade for our iron manufacturers, and one which, properly worked up, would furnish business for a number of furnaces and wheel foundries now idle. The great demand for, and high prices of, cold blast charcoal wheel iron during the excitement attending the building of so many new railways previous to 1874 greatly stimulated the erection of charcoal furnaces. and the panic found them with large stocks of wheel irons, idle foundries, and no demand until the price of this grade of iron has declined from \$65 per ton, in 1872, to \$40 at the close of 1874. According to the estimates of Mr. Edward Samuel, in his review of the trade for 1874, no less than 125 charcoal furnaces, with an aggregate productive capacity of 9029 tons per week, were out of blast at the close of the year, while the stocks reach near 275,000 tons, of which it would be fair to assume one half. or 137,000 tons, as cold blast wheel irons.

The history of car wheels in this country shows that the disadvantages of the spoke wheel, and, indeed, of all combinations of wrought iron with cast iron or steel, Twentieth Page.—Western Coal. Workshop Were early discovered. So far back as Recipes. 1838, Mr. Geo. G. Lobdell, of 'the Twenty-sixth Page. New York Wholesale Wilmington Car Wheel Works, and Prices of Hardware and Metals. whose views on the manufacture of car wheels, as given in a paper lately Thirty-first Page.—Philadelphia, Buffalo, Cincinnath, and Detroit riardware and Metal Prices.

Thirty-third Page.—Chicago, Boston, and St. Louis Hardware and Metal Prices.

Thirty-third Page.—Chicago, Boston, and St. Louis Hardware and Metal Prices. cast in one piece, which was known as the "double plate convex wheel," the plates being convex on the outside, while, to allow for unequal contraction in cooling, the A comparison of the number of acci- hub was parted transversely. This wheel secured abroad. The reasons for this may ented annealing process while cooling. To

foreign company. The means by which the chill gives a degree of hardness and high wages. So long as the speculation American exhibits. The principal countries this immunity from accident is attained are durability to the surface or tread which lasts values and wages are, to a great ex- of the world have signified their intention undoubtedly to be found in the adoption has never been attained with either the tent, maintained. With us this period has to take part, and we may expect a display

The export trade in car wheels has already attained respectable proportions, having been predicted every year since the war, lected at Vienna. We may also expect an ment, as by the Wharton safety switch; in been in 1873, 7515 wheels, most of which, did not come until we had ceased to influx of visitors from all parts of the an improved system of telegraphic signals, however, were for South American account, or were shipped to Europe, generally in the form of street car wheels. In re- have made a great industrial progress, and so favorable, which will probably lead to gard to the life of chilled wheels, it was enjoyed much of real prosperity. But an increased foreign demand for American stated at a late meeting of the Masters Car Builders' Association, that the report of the Lake Shore Railroad showed that the wheels removed during the six months previous to April 1st, 1874, had averaged 57,000 miles, the smallest average being 54,000 miles. These were 33 inch wheels, run under heavy cars at high speed. In this connection, Mr. Davenport, of the Eric Car Works, stated that he knew of iron wheels which had run 200,000 miles and were yet good. Another wheel founder stated that his company sold car wheels to the Pullman Car Company on a basis of 50,000 miles, receiving credit for any ex cess, and standing the loss for any that fell short. Their lowest average in mileage for the past six months was 59,000 miles. We give these details for the benefit of our English readers who may wish to insure the safety of railway travel by an import ant factor. To the objection offered to the correspondent of the Times, that the sudden changes of climate in England unfitted our wheels for use there, it need only be said that to our discomfort we admit of much greater changes of climate here; that cold does not necessarily render iron brittle, and that in the case of a car wheel the duty it performs necessarily clevates its temperature in a few miles of work above any possibility of rupture from foolish policy will be that, after spending a dividend upon the Centennial stock, we frost, even if frost weakened it. It would be an easy matter to show that the economy from the use of acquire a mortgage on their future earn- disappointed, the exhibition, if otherwise American car wheels, both in first cost and ings, the workingmen who now refuse the successful, would still "pay" the counincreased mileage, would make them a desirable purchase for English railways. This would be here useless, however, as prosperity for many years to come will be in to more than offset any possible differthe demonstration, to be effective, must be proportion to the cheapness of our production to the amount expended and made on their own roads and under their tion of useful commodities for consumption the amount available at the close own conditions. As the Pullman parlor and export. In no other way can we re- of the exhibition for division among and sleeping coaches have been introduced tain our home markets and secure a foreign the stockholders. We do not think abroad, this would seem, if indeed they demand for our surplus products. The that stockholders need feel any uneasiness are allowed to be run on American trucks, the opportunity of testing the superiority of American cast iron wheels. To the American iron trade this subject offers

> great profit. In our issue of next week we shall present our readers some facts of unusual incar wheel irons, as determined by recent sults of these tests are so remarkable that ers until repeated tests had given an equally which shall bring its attendant evils and as to the profits likely to result therefrom. high average. From the tables which will leave us its heritage of curses. The trade be given, it will be seen that in urging the advantages of American car wheels upon of prosperity on the new basis of lower foreign railway managers we have claimed values, but only temporarily, and labor for them no greater excellence than they will suffer first and most heavily from actually possess.

matter for thought, investigation and enter-

Hard Pan.

In some respects the situation in Germany presents a curious parallel to that prevailing in this country at the present time. The Cologne Gazette, in a review of the state of trade in Germany, says:

year, is that, as the promises of the socialists and other demagogues have not been realized the workingmen now find themselves obliged to revert to their old habits of industry and

Like ourselves, the German people are getting down to what, in this country, we

cept the inevitable. Among those who many directions. compose the trade unions in most of the ployers to withdraw their offer and acceed to the terms insisted on by the unions. Hence, we witness the strange spectacle of unions may temporarily obstruct the return the disorganization and demoralization resulting from strikes.

The Centennial Exhibition.

Work upon the Centennial buildings is making good progress, and the liberal contime. The Cologne Gazette, in a review of the state of trade in Germany, says:

In 1874, although the great bubble schemes burst in the summer of 1873, and although last year a plentiful harvest of corn and wine came to our relief, the consequences of the crisis are still felt. Numerous undertakings are depreciated, and even more lamentable than the loases of the sudden excessive rise in wages, which could not possibly last, the luxurious habits, the strikes, and all that these involve on the laboring classes, and the whole industrial life of the German nation. Habits of indolence and gluttony have been established which it will be hard to cradicate. In many establishments at Berlin work is still suspended at noon on Saturday, and not resumed till late on Tuesday morning. The natural result is that the products of German industry have become dearer, that our exports diminish, and that we import many things from abroad which we could very well manufacture ourselves. A characteristic example of this is that the city of Berlin is procuring 300,000 centners of iron piping for the canalization scheme from England, instead of employing native industry. If, as is alleged, the English supply it at half a thaler per centner cheaper than our own works, no objection can be offered to the saving of 150,000 thalers. The truth is, that as regards the production of iron, which we thought was a nucleus of German prosperity likely to surpass foreign countries, our hopes have speedily been dispelled. One good effect of the scarcity of employment, in itself very deplorable, which has occasioned numerous dismissals at Berlin at the end of theyear, is that, as the promises of the socialists and other demagogues have not been realized, the worklapmen now find themselves obliged. tributions to the funds of the Board of

From present appearances we feel safe in predicting that the Centennial Exhibition railway transportation, and is, so far as we affords the greatest possible strength characterized by abnormal activity in cer- ments of space considerably in excess of Gradually, production has recovered in 1874, al-

tain directions, a high level of values and the total accommodations provided for been protracted long beyond the general of foreign products and manufactures expectation, and the panic which has quite as extensive and varied as that colexpect it. The delay was fortunate, world, attracted hither by curiosity to see no doubt, for in the interval we this young republic under circumstances now that the change has come, we must manufactures, especially labor saving maadapt ourselves to it precisely as we must chinery and machine-made commodities. have done had it come five years sooner. and an inflow of foreign capital. It is un With us there is reason to believe that the necessary, at this time, to re-enumerate the panic means merely a change to a sub- direct and indirect advantages which will stantial basis of prosperity from one to result from the exhibition, especially as some extent artificial and unsubstantial, the public are already beginning to discover Nothing now seems to stand in the way of and appreciate them; but it is safe to presubstantial improvement except the un- dict that it will quicken the pulses of willingness of the working classes to ac- trade and stimulate national progress in Will the Centennial pay? With the

great departments of national industry, the American people this question naturally idea seems to have gained ground that the presents itself in connection with this and offer of lower wages is an effort on the part all other undertakings. It may, we think of employers to take an unfair advantage be answered unhesitatingly in the affirma of the workingmen; that no such reduc- tive. Propably no country of the world tion is necessary; and that, by refusing to has so large a population of people in comaccept lower wages they can compel em- fortable circumstances, able to visit such an exhibition without inconvenience. Philadelphia's position is such that the resid ents of the most populous of the Atlantic an army of workingmen voluntary aban- seaboard cities can reach it in a few hours doning work at a time when not more than by rail, and the attractions will be so great thirty in every hundred could obtain em- that all who possibly can go will do so. ployment on any terms, and not that pro- Indeed, it may be said that almost the entire portion except for the very natural and well-to-do population of the country will laudable desire on the part of employers visit the exhibition once or many times durin all trades to make as liberal a provision ing its continuance. A large revenue may as they can for their work people during therefore be expected from admission fees, these hard times. The only result of this and if the earnings are not sufficient to pay their earnings and getting themselves may, at least, expect that the principal will heavily in debt to shopkeepers, who thus be returned. But were these expectations wages offered them will be glad to secure try. The direct and undirect advantages work where they can find it. Our national therefrom resulting, will be great enough tariff has established our industries on a as to the safety of their investments, but broad and substantial basis. If we can se- it would be a shortsighted and narrowcure a continuance of protection for them, minded policy to hesitate in advancing peso much the better; if, in the changes cuniary aid to the undertaking on that acwhich now seem to be inevitable in our count. We should be sorry to see the Cenprise, and if successfully carried out, of national politics, protection should be with- tennial degenerate into a speculation to drawn, those industries must stand alone. make money for the stockholders, and In any event the cost of production must while the managers of the enterprise should be reduced, and the reduction must begin consider the interests of the stockholders terest, showing the quality of American with wages. Labor will lose nothing in in everything, we hope they will make the the end, for prices have declined and are success and popularity of the exhibition and thorough mechanical tests. The re- still declining, and there is no reason to their first care, feeling sure that those who believe they can be again forced up, until have advanced money to carry on the they were not accepted by the experiment- the country is involved in another war, work have had very modest expectations

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New Publications.

USEFUL INFORMATION FOR ARCHITECTS, ENGINEERS AND WORKERS IN WROUGHT IRON. Phosnix Iron Co.: Office, No. 410 Wainut street, Philadelphia. Works, Phosnixville, Pa.

This convenient little volume contains much interesting and valuable information, skillfully compiled, and will prove handy for reference by those for whose use it is especially intended It gives the standard tables for architects' and engineers' use, which are designed to save the trouble of making calculations, tables of standard weights and measures, wire gauges, specific Finance, which are now coming in, give promise that the preliminary preparations It is bound in choice Russia leather, is of convenient size for the pocket, and is provided with blank pages for memoranda.

The World's Supply of Tin.

From statistics and reports received by late mails from England and the Continent, we coning, and aid is coming in from quarters dense the following facts and observations, which have hitherto neither encouraged which may assist us in forming some ideas regarding probable or possible developments in this metal:

The English Mines .- Some deficiency in the supply for 1874 seems to have been apprehended, but these fears were not realized. A good many mines had been working at a loss, ing to the national pride. The interest others without profit, but there has been no slackening of activity in the county of Cornwall, and thus the aggregate production has been as large as that of the preceding year.

The Amount of Banca Marketed .- The Dutch Trading Society placed on the market, in six bi-monthly sales, 4049 tons Banca, keeping on hand, unsold, at the termination of last year, in Holland, 3858 tons, against 3708 the year pre-

The Billiton Sales at Batavia .- The Java sucment was no longer needed to insure its tions comprised, in six bi-monthly sales, 8157

The Supply from the Straits of Malacca .- It will be remembered that in 1873 there occurred will be creditable to the American people, serious disturbances amongst the natives inhabiting the districts of production on the great Peninsula-that of Larote, particularly, suffering severely. But owing to the energy displayed by the Euglish in quelling these riots, order was soon restored-not, however, without resulting or negligence of the company. This is at the property of the recompany. This is at the property of supply of some example of the very best management in The toughness of the metal used thus few years following a great war are usually tending domestic exhibitors call for allotsome 2700 tons; in other words, the interruptons in two years, and would have proved a bers levied at the discretion of local and irre serious matter but for the vigor displayed in

Australian Production .- There are few instances on record in mining matters, in all likelihood, that will offer a parallel to this Australian development in tin production. From 150 tons in 1872, production there was multiplied twenty fold the ensuing year, in order to be again nearly doubled last year. The world's supply trade struggle in which the course pursued by may, therefore, be summed up as follows, as the workmen merits the sympathy and assist

Combared with one bre-	CCUILLIE	LWO Jento .	
	1874. Tons.	1873. Tons.	1872. Tons.
	10,000	9,970	9,860
Banca	4,049	4,355	3,209
Malacca	3,157 7,149	6,963	9,785
Australia	5,800	2,990	180
Total	80.155	27.258	25,644

It will be perceived that, in spite of the temporary deficiency in Malacca, Australia has sufficed to increase the general supply 171/2 per cent. in the short space of two years. No wonder, then, that with an inadequate increase of consumption prices should have declined from an average of £146 for Straits tin in 1872 to one of £132. 10/ in 1873, and £98 in 1874.

Consumption .- The aggregate consumption of Europe and the United States, in 1874, is estimated by the European statisticians at 28,500, against 26,000 in 1873 and 27,000 in 1872. The hope is expressed in England that with the lower rates now current for both iron and coal, greater impetus will be given to activity in manufacturing tin plates, and that the consumption of tin be thus stimulated.

Next in order comes the VISIBLE SUPPLY OF TIN

TAULDRAM NO A K MA	A. W.	0.7.6	
	1874.	1873.	1872.
I	ec. 31.	Dec. 31.	
	Cons.	Tons.	Tons.
London etock of foreign	2,649	1,622	796
London stock landing	248	833	170
Straits afloat for London	1,574	585	649
Australian affoat for London	1,500	1,000	
Banca on warrants in Holland		684	1,111
Billiton on war'ts in Holland		829	479
Billiton afloat	774	402	339
Unsold Maatschappy, Banca			
stock		3,708	2,146
Banca afloat		374	1,357
Total	12,434	9,486	7,037

Now that the full figures up to the close of the year are to hand, we find that we are borne out in our remarks at foot of our own annual review: "It will consequently require a large and healthy trade early in the coming year, in order to mend the statistical position. On the other hand, it cannot be denied that tin is comparatively cheap."

The statistical position of the metal, it will be seen, is far from being a reassuring one. It wiil, indeed, be perceived that consumption in 1874 increased but 2500 tons, while at the very outset of the present one we start with an excess of about 3000 tons in tin in eight. Even admitting, then, that with a general revival in the metal trade, both in Europe and America, we exceed the consumption of 1874 by 5000 tous, 3000 tons of this increase go for nothing at the very start, while Malacca is now fully restored to its productive capacity, and Australia may, with the example of the past three years before us, prepare us another surprise in the way of rapid development.

The highest price which Straits tin has attained during the past three years was £160, and the lowest £87. Australia, in fact, has been and remains the great disturber of tin values; that country is very remote, and, although New York is in constant correspondence with that distant corner of the globe on the very subject of tin, we have, as yet, been unable to procure any reliable data as to the probable future supply from that quarter, which has been and remains shrouded in mystery.

Viewing then the general position of the tin supply in the light shed upon it by the latest European statistics, and prognosticating from them as to the probable ruling of values in the more immediate future, an impartial glance cannot fail to carry the conviction to our minds that the prospect for enhanced values is in the highest degree problematical, unless, as of old in Holland, the capitalists of Europe should think differently, and deem the metal about the safest thing to invest their spare cash in. - We should be very much surprised to see them arrive at such a conclusion.

tant Federation of British Trade Unions

Our English correspondent sends us the following :

try were desirous of federating themselves in her wealth to general causes, and her greatness firmly united organization on a scale equal to dustries. that of the employers. They have now, I believe, sketched out a scheme for effecting this enormous splendor of Berlin, are not so singupurpose, and have just issued a circular on the lar as the growth and splendor of Philadelphia. subject, of which the following is a copy:

ing Trades:

been instructed by the councils of our respect- Seven Hills. In four years Philadelphia does ive associations to invite your attention to the the same. No one supposes that Rome will ized bodies which at present occupy comparatively isolated positions.

tablishment of assurance companies for the impulse of events longer than Rome; for Gerprotection of employers in their contests with many is a bigger country than Italy, her State ere long, be compelled to federate together, in citizens, both civil and military, will find their order to successfully meet the wealthy and in- interest in being at the Emperor's court. Yet fluential combinations which capitalists have in Berlin, as in Washington, Madrid, and other now formed.

councils, which appeared to find favor with the sea for purposes of trade. Berlin is land-locked, depth,

and wealthy societies, with important interests tion caused a total felling off some 5700 at stake, can never submit to having their memsponsible bodies; and any increased facilities for sending round the begging box will utterly fail to produce any real assistance in cases o emergency

"What is really required is a federated unio of those societies which are already organized on sound financial principles, for the purpose of creating a fund available in any important ance of the trades thus combined for mutual protection. Remember that if this is not done by the amalgamated trades, the employers' and capitalists' federated unions will be sufficiently strong to batter down in detail the whole of th

unions in the country.
"Whether this object can be best attained by the establishment of a guarantee fund, to which each society shall annually contribute in propor tion to the number of its members: or whether some better and simpler method of attaining the desired result can be suggested, are matter which we do not at present propose to discuss But we would suggest that, in order to insursuccess, it is desirable that we should at first limit our operation to trades already well organ ized, and we can afterward widen the scope of our federated association whenever circumstan ces may render such a course desirable

"If, after due consideration, you should con ider that a federation of the various societie in the iron and building trades is desirable, yo are requested to express your approval by letter, in order that the necessary arrangement may be made for a meeting of representatives of the various societies interested in the move ment, to be held during the sitting of the Trades Union Congress at Liverpool in January (Signed)

"JOHN KANE, Amalgamated Ironworkers Association, Darlington,

"JOHN D. PRIOR, Amalgamated Carper ters and Joiners, Manchester.

"ROBERT KNIGHT, Boiler Maker and Iron Shipbuilders' Association, Liverpool.'

Philadelphia.

Mr. W. Hepworth Dixon, the distinguished author of Greater Britain, has written a letter from Philadelphia to the Liverpool Mercury, from which we take the following

The growth of Philadelphia is, in truth, amazng. Men are living in Walnut street who recall a day when she was not as large as Croydon. She is now bigger than Berlin-nearly as big as New York. In 1830 she was about the size of Edinburgh. Ten years later she was as big as Dublin. In another ten years she had outgrown Manchester. In 1860 she was ahead of Liverpool. At the present moment Philadelphia is more than equal to Manchester, Liver-pool and Sheffield combined. If the population of Dublin and Edinburgh, York, Lancaster and Chester, were counted in one tale, they would hardly make up half the numbers who live in Philadelphia at this present day. If size is but another name for power, the City of Brotherly

Love is metropolitan. Leaving out of our account the more than doubtful figures as to Chinese cities, Philadelphia claims to be the fourth city in the world. admitting no superior in size save London. Paris and New York. She overcaps all other rivals. She is bigger than Moscow and St. Petersburgh-the two capitals of Russia-put together. The three capitals of the Austro-Magyar monarchy-Vienna, Pesth and Praguefall far below her numbers; nay, she has left behind her in the race of progress the four combined capitals of United Italy-Rome, Florence, Naples and Turin! She claims to have at the present hour a population somewhat exceeding

Yet there is nothing accidental in the growth of Philadelphia. She has not been made a royal residence like Rome, the center of a new imperial system like Berlin. No great discovery of mineral wealth has drawn to her neighborhood the enterprising spirits of all nations, like San Francisco. She has not become the chief entry of immigrants from Europe, like New York. She has not sprung into a fashion like Brighton and Saratoga. She has not owed her or to her having taken the fancy of a Cæsar. like Madrid. Her growth is natural growth. We notice an abnormal growth in many towns. A railway bridge secured prosperity to Omaha I have several times mentioned that the larger | a line of docks made Birkenhead; a spring of and more powerful trades unions of the coun- oil gives life to Petrolia. Philadelphia owes such a manner as would give a complete and is not jeopardized by the failure of a dozen in-

The sudden growth of modern Rome, and the No city in our time has thriven so much as "To the Officers of the various Organizations of Rome since she became the capital of Italy ; but Workmen connected with the Iron and Build- Rome, after all, is, in point of population, a sixth-rate town. In three years London adds to GENTLEMEN-We, the undersigned, have her numbers more people than cluster on the government, with a court, an army, and a par-The powerful organizations of employers also grown with an amazing swiftness, and the which have recently been formed, and the es- capital of an imperial Germany may feel the artificial capitals, the limit of this accidental

though not as yet reaching that of 1872 by Congress, is really of little value. The large like Madrid. Few things are more certain in this age of change than that the future capitals of the world will stand on both the elements and be, as Constantine said of old Byzantium ccessible at once by land and sea.

Philadelphia can boast of her approaches both y land and sea; yet of a situation free from all the ordinary chances of assault in time of

and in Pennsylvania, showing that in 25 years Philadelphia will have passed New York, as she richness, and the extent of the deposit. They with London, owning no other rival on the

Railroad Accidents in 1874.

The Raffroad Gazette of this city, an excellent and well conducted journal, publishes the folowing: Our monthly record of accidents to the twelve months ending with each record, so that so far as these items of information are ncerned, we can give nothing better than the figures for the calendar year, which is the econd during which we have recorded them. For the two years they compare as follows:

Killed. 276 204 72 394 ...23.77 26:05 The decrease, it is seen, is a very marked

ne, indicating decided progress in the right direction, and it is the more remarkable because there was about 3000 miles more of road in operation in 1874, and, more than all, a very large number of railroads, because of their poverty, were permitted to get into very bad condition in 1874. On the other hand, there was no such trying season in 1874 as the first part of 1873, when in three months we reported Again, among the economies of the railroads during the past year, one of the commonest has been an economy in the number of trains-even those doing an increased business usually doing it with a decreased train mileage-while there has been especially an economy in the faster trains. New railroads, where no inducements could attract a large passenger traffic, having to work at the least possible cost, have often taken off their express trains, or run them at moderate speeds and at intervals somewhat corresponding to the actual demands of traffic; and not a few lines have had only mixed trains, and these sometimes not so often as once a day. The effect of low speeds in reducing the number of serious accidents is very great, and is exemplified in the South, where, with most imperfect railroads and rolling stock, cidents which hurt anybody are comparatively rare, though "run offs" are so common

that they are hardly noticed. A comparison of the causes as well as the nature of accidents is given below 1874. . 131 . 87 . 19 . 23 1873. 187 162 31 72 1874. 1873 Collisions. nexplained... 260 392

315 72 44 54 111 19 11 26 21 Actile on track.
Broken rail.
Failure of bridge or trestle
Malicious obstruction.
Breaking of wheel.
Breaking of axle.
Spreading of rails.
Snow or ice on track.
Defective switch.
Wash-out. Wasn-out.
Breaking of truck...
Defective frog....
Failure of coupling.
Displacement of rail. Open draw...
Defective rail joints....
Loose wheel.
Fall of bake or brake-beam
Running through blind siding... Careless stopping or start'g Overloading car Bad switching... Runaway train Accidents without Collision or Derailment.
Burning of running cars.
Boiler and cylinder head ex plosions.

Breaking of parallel, connecting & eccentric rods.

Flue collapse...

Steam chest explosions.

Flue plug blown out.

Breaking of bridge.

Mass falling on run'g train.

Breakage of rolling stock.

Accidental obstruction.

Total.... 978 Accidents.

....3.51 3.51 The gain of a life every five days and of eleven sound men every ten days seems to us a result appears to be the result of last year's running this accident report, however-so many accigreater exercise of skill, conscientious care and discipline—that railroad managers should not 16/has to be paid for canal dues. contemplate it with much satisfaction. It might have been worse, it is true, and it has

as it is.

Investments.

The Ottawa Citizen says : We learn that representatives of a leading fron firm in the United States came to Ottawa last week with a view to organizing a company to develop the valuable iron mines owned by our enterprising fellow citizen, Mr. A. H. Bald. The other day I saw a calculation by a clever win. They visited the mine, tested the ore, and expressed themselves highly satisfied as to it has already overtaken Constantinople, and in are practical men, having large experience in 25 years more will have overtaken Paris; so the manufacture of iron and a thorough knowlthat she will then be in a position face to face edge of working mines and constructing furnaces. They are now prepared to commend work at the mines by building workshops, furnaces, etc., at a cost not exceeding, for the present, \$175,000. They are willing to take tock in the company themselves to the extenof \$75,000, on condition that the county of Ottawa and this city will each grant a bonus of \$25,000 in aid of the enterprise; the balance of strong: Our months of accidents \$50,000 stock to be taken up by the public. In and of those killed and wounded by them for addition to this a working fund of \$50,000 wil be required, making a total capital of \$225,000. The exact place where the furnaces and work shops are to be built has yet to be decided, but we are given to understand that some of the works connected with the enterprise will be located in Ottawa, from which the supplies for the company will also be derived, if the manu facturers are met in a liberal spirit by our citi zens. In the present condition of our city finances, we cannot urge the corporation to grant the bonus required, but we need scarcely remind them that it would be well to give the company such encouragement as they can afford to bestow on an enterprise, which, if success ful, will contribute immensely to the future prosperity of the capital. There is a tide in the affairs of cities, as well as of men, which taker at the full leads on to fortune. Ottawa's opportunity has arrived, and we hope it will no e neglected. What the corporation may be unable to do, private capitalists can accomplish. no less than 423 accidents against 276 in 1874. There are two valuable iron locations in the immediate vicinity of the capital, which, if properly developed, will make Ottawa the Birmingham of Canada. The Pacific Railway must be constructed. If the present government decline to build it, the people will give the treasury benches to men who will undertake the Immense quantities of rails will be re quired for the road, and there is no city in Canada possessing greater advantages for the establishment of the rolling mills that will be required to furnish them, than Ottawa. We are satisfied that the company's property in the city will be exempted from taxation for som years to come, but even more substantial aid than that will be required to insure the succ of the enterprise. We have contributed liberally toward railroads, and we have found the estment remunerative in the end. A similar result, but in a much larger degree, will follow

Depreciation in British Iron Ship Property.

any aid that may be given toward the develop

ment of the mineral wealth in our vicinity, and

the establishment of new manufacturing enter-

prises in our midst.

The Liverpool Commercial Express, of recent date, states that British iron steamships and sailing vessels have, during the last two or three years, undergone a heavy depreciation; that second hand iron steamers, with all the modern improvements, can be bought 15 to 25 per cent. lower than the prices of last June; that many builders and engineers are short of work, and that all appearances tend to a worse condition of things than now exists. As compared with two years ago, according to the same authority, the depreciation in all classes of British iron vessels is rather under than over estimated at

30 per cent. The chief of the causes that have operated to bring about this result, is unquestionably overproduction, especially of steamships. A few years ago the opinion was quite general that of the world would greatly accelerate employment of this class of vessels, and accordingly of the United Kingdom was utilized to the utmost extent, not only for the British service. but to some extent for the flags of all nations, the United States excepted, our navigation laws ship carriage in the leading trades of Europe The average number of accidents, killed and derful increase, especially of Scandinavian, injured per day for the two years was as fol- Italian and Austrian tonnage, at our ports dursail tonnage driven out of its accustomed channels, the growth of steamship carriage has been of trains as compared with the previous year's, small degree to the depression. For example,

Next, it may be mentioned as an illustration, workmen, are un evidence to us that we shall, system is less parochial, and more of her chief been worse before; but is very much too bad ly built, beside having diminished freights, are obliged to pay 10d. per ton for each ship to Engineers of the Prussian government have trade the past year has been the most disastrous ores now, and will not, in all probability, until made a boring to the extraordinary depth of to steamships ever known. The rates for a depth of 200 feet or more is reached; but then "This question was discussed at the Sheffield Trades' Union Congress, but without any practice of the European Congress of th tical result. The idea of a federation of trades mercial center, with a port sufficiently near the feet, and continued to be found at the lowest the less expensive sailing vessels, and it is not, the mine will yield workable ores no longer, therefore, suprising that the principal lines be- but may be of value for other metals.

United States Capital Seeking Canadian tween this port and Great Britain and the north of Europe ports contemplate reducing the number of ships employed. The Liverpool paper from which we have quoted says, that the demands of trade are not so exacting that very port in the United Kingdom cannot show a fleet of steamers whose occupation is for the resent suspended.

These are, of course, deteriorating in all possible ways-they yield nothing, but act as a tax on revenue, and they suffer from gradual decay : all of which is certainly a mute testimony to the solidity and soundness of the opinion ex-pressed that it is likely to be worse before it nends. The advancing tendency of underwriter rates and of labor, coal and iron in Great Britain is calculated to deprive our Engish friends of the advantages they have hitherto had in shipbuilding, when a revival of com nerce takes place. Even now, Mr. John Roach, our foremost iron shipbuilder, has demonstrated the fact that he can build as good an iron ship is the best Clyde builder, and as cheaply, the quality of the material being equal.

The Iron Mines of Crawford and Dent Counties, Missouri.

The St. Louis Democrat publishes the followng interesting communication respecting the Benton Creek Iron Mine :

The Benton Creek Iron Mine is worked by the Meramec Iron Mining Company, of which B. W. Lewis, Jr., is president. It ought to be called the Massey Mine, having been entered some forty or fifty years ago by Samuel Massey, the pioneer of iron business in the Meramec region. It is situated directly on the line dividing Crawford and Dent counties. Some 36,000 tons of ore have been shipped from the mine in the last wo years, and a mass of ore is now stripped which will turn at least as much more. But little ore is being shipped at present, owing to the depressed condition of the iron trade. The policy of Mr. Lewis, and of Capt. Herndon, superintendent of the mine, is to continue stripping ore and opening cuts into it, in order to be ready for any demand when the fron business revives. To my notion the mine is scientifically worked in the best sense of the term. All the outfit is simple and inexpensive, but effective; and the rule is to follow the ore, without any theory as to where it ought to be, and to get it out to the shipping platform by the shortest road. If science is "the essence of human experience," as Prof. Swallow once said, they have it as the Benton Creek Mine; because exerience has proved that their mode of working s best. About twenty men are now employed mainly in preparing for taking out ore when the proper time arrives. In all the cuts more or less ore is encountered, and this is saved if merchantable;" but many hundreds of tons are thrown out in the common dump as not suited to the market, but which would be regarded as first-class if found in Pennsylvania and other States.

The St. Louis, Salem and Little Rock Railroad runs from Cuba, on the Atlantic and Pacific Railroad, to Salem, in Dent county-one of the best built roads in West. A branch about one mile in length has been built by the Meramec Iron Mining Company from this road to the mine, and is of the same excellent construction as the main track. Thus the ore goes directly from the mine to the cars. The iron company wns seventy-five cars.

The Benton Creek Mine property is an immense hill, the dome of which contains the ore now visible, which seems to constitute a sort of rlm to a large basin, from 300 to 500 feet in diameter. This basin is rather oblong than circular, and its depth can only be conjectured. The State geologists, I am informed, say that the bottom of the basin will soon be reached, as it is not below the sandstone strata of that region. If the geologists say this they do the State great wrong. I have been under ground far below the sandstone in the Meramec region, in a mine carrying massive ore just like the ore of the Benton Creek Mine, and I know that the sandstone has nothing to do with limiting the the rapid development of commerce in all parts depth of the ore. It may be that the State geologists have a theory, and want to make the facts conform ; but facts are sometimes stub the capacity for building them on the Clyde and born things, and do not conform. I have studied in all the other principal shipbuilding districts the geology of the Meramec region for the last twenty-five years, getting my facts first, and from them deducing theory. I have seen enough of that region to satisfy me that many of the fron mines are but the "backs" of lodes or forbidding the registration of foreigh built veins of indefinite depth; and I have no doubt tonnage. So rapid was the growth of steam- that the Benton Creek Mine belongs to this class. The basin will, I think, prove to be obthat an immense amount of sail tonnage that long in shape, the side veins, now separated by had formerly been employed there was forced a mass of waste material, coming together at into the trans-Atlantic trade, a pretty good evi- the northward and southward ends; but I do 1.283 dence of which has been afforded by the won- not think the bottom of the "deposit," or pocket" (as I am told the State geologists all it), will ever be reached. I take the whole ing the last two years. But even with all this thing to be an immense lode, or chimney voin, for whose origin it is difficult to frame a satiafactory theory, but which traverses all the forso rapid and the competition so sharp as to les- mations above the granite. The amount of sen the earnings of that class of vessels, the rich, workable ore is enormous, and will not be worth rejoicing over and working for, and that partial failure of the cereal crops in Russia and exhausted for many years; but as the workings Southern Europe last year contributing in no reach to the permanent water level of the "country," the ore will change in character, or importance of a federation of the various organ- grow for ever as she is growing now. A new There are so many disagreeable facts shown in grain freights from the Danube to England in rather, the normal or unchanged part of the 1871 were 10/ per quarter, against 6/ to 7/ the vein will be reached, and we shall find it sulliament cannot enter every year. Berlin has dents which could have been prevented by a present year. Then, also, Suez Canal freights phurous, with probably copper, lead, silver or have fallen to 35/ for steamers, out of which tin. In the old Stanton Mine we went ten fathoms below the water level, and found the vein to be "mundic," or sulphuret of iron with that vessels for the ore trade, which are special- a little copper in it, precisely as the Cornish miners told us we should find it. The Benton Creek Mine will probably show the same condi the Spanish government. In the trans-Atlantic tions. It shows no copper or sulphur in the

Lake Superior Notes.

We take the following from the Marquette

run on soft wood coal, went into blast May 1st, 1874, and up to the 31st of December had made 4942 gross tons of iron. We have seen it stated, in Mr. Swank's publication, we think, that the experiment of making iron with soft wood charcoal had proved a failure. That such is not the case the above figures fully attest. Nothing but coal from soft wood-principally pine slabs from the lumber mills-was used, and with it the furnace has turned out as large a product as some others that have used all hard wood.

No. 2 stack of the Bay Furnace made last year, in a run of 258 days, 6645% gross tons-of which 6070 tons were made on the blast commencing May 25th, at which date she was blown in after having been remodeled. Previous to that time her average daily product was not to exceed fifteen tons. For the last four months she has been making a daily average of over thirty tons. No. 1 stack was only in blast a short time last summer and made 1713 gross tons—a total of 8359% gross tons for day dissolved. The affairs of said firm will be both stacks.

opening on the Michigan Iron Company's property, south of Clarksburg. The name adopted is the Union Iron Company, the capital stock of which is \$500,000, divided into shares of \$25 each. The officers are, R. S. Fay, of Boston, president ; C. G. Blake, secretary and treasurer : and a board of directors as follows : Messrs. R. S. Fay, E. Breitung, H. J. Colwell, Jay C. Morse, Jas. Pickands, A. A. Ripka and W. L. Wetmore. Recently a drift from the shaft toward the north has exposed a valuable deposiof ore, so that the prospect is believed to be favorable for a good working mine. The properly owned by this new company is the south half of section 7, north half of section 18, and north half and northeast quarter of southwest quarter of section 17, town 47, range 28-1000

The product of the Escanaba Furnace for 1874 was 6335% gross tons. In the blast from May 1st to January 1st her product was 57721 tons. A letter from the agent informs us that the affairs of the company are not nearly so bad as has been represented. The iron was not attached, but was turned over to the railroad H. H. Chandler & Co., Newspaper Advertisemen company under an agreement previously entered into. It was necessary to blow the furnace out for repairs, and we have the assurance that the stack will be lighted again as soon as the repairs can be made. Some of the wood contracts were canceled simply because company already have a large amount of fuel on hand, and their continuance was not at all necessary. At some of the locations forces are still at work getting in wood. We are pleased to get this report, and hope soon to hear that the furnace is again in successful operation.

The London Fire Service .- A correspondent of the Herald sends the following account of the London fire brigade : There are now 50 stations of the brigade in London, and four stations are on the Thames, where steam floating engines are moored. In connection with these stations, which are all in communication with each other by means of the electric telegraph, there are 53 telegraph lines and 85 miles of telegraph, one iron floating barge to carry a land steam fire engine, five large land steam fire engines, 14 small land steam fire engines, 15 7-inch manual fire engines, 56 6-inch manual fire engines, 12 under 6-inch manual fire engines, and Partner Wanted in a Large Ma-396 firemen. There are 105 fire escape stations and 125 fire escapes. The number of firemen employed on the several watches kept up during the day is 90; the number at night is 181, so that 271 are employed on watch duty in every 24 hours. The number sick, injured, on leave or under instruction is usually between 40 and 50. The remaining men are available for general work at fires. During 1873 the calls made on the brigade for a turn out of engines proved and most valuable machinery, largely was as many as 1703. Of these 83 proved to be false alarms, and 73 were alarms of chimney Of fires other than chimney fires there were 1548, of which 166 resulted in serious damage, and 1382 in slight damage. In 20 of those fires life was lost, and in 74 of them life was seriously endangered. The number of lives actually lost was 35, of whom 12 were taken tions desires to manufacture new artisubsequently succumbed in hospitals or elsewhere. The total number of calls for chimney the calls for chimney the total number of calls for chimney the call fires, and in which no alarm of general fire had been raised, was 3602. In these cases there was no attendance of engines, but only of firemen with hand pumps. The quantity of water used for extinguishing fires in the metropolis during the year 1873 was about 32,500,000 gallons, or 101,000 tons. The working accounts for the year show the expenditure of the brigade to have been nearly \$370,000. Of this between \$180,000 and \$185,000 went in salaries and wages, and nearly \$10,000 for men's clothing; something under \$2500 for payments of medical officers, and about \$2500 in pensions to late officers and to widows.

A valuable deposit of quicksilver has been found in the State of San Luis Potosi, in Mex-

The West Cumberland Iron and Steel Company-a British corporation-report a loss of \$190,000 on the business of last year.

The Parliament of Victoria, Australia, has granted a sum of \$50,000 to be expended in prospecting" for gold, coal, and other min-

The British Admiralty have purchased, for \$90,000, the steam whaler Bloodhound, with hor the view of sending her with the Arctic expedi-

The Peninsular and Oriental Steamship Com pany, the rival of the American Trans-Pacific line, has paid dividends amounting to 7 per cent. for the past year. It has a fleet of 122,000 The Menominee Furnace, which was built to tons, and assets amounting to \$23,680,000.

Special Notices.

Notice of Dissolution of Copartnership.

The copartnership heretofore existing between J. J. HOGAN, A. L. CLARKE and J. HENRY SLEEPER, under the firm and style of HOGAN, CLARKE & SLEEPER, was dissolved by expiration of its term on the 31st of December, 1874. The affairs of the late firm will be settled by either of the undersigned.

J. J. HOGAN,
January 1, 1875.

ADDISON L. CLARKE.

The undersigned have entered into a copartnership under the name and style of HOGAN & CLARKS and will continue in the Commission and Jobbin Hardware business at 105 Broad street, Boston.

We have a large stock of Washoe Tool Mfg. Co.'s Picks and Eyes, which we are closing out at a low

The firm of H. A. ROGERS & CO. (consisting of H. A. ROGERS and W. C. DUYCKINCK) is this exclusively liquidated and adjusted by W. C. A company has been organized to work the DUYCKINCK, at the old store 50 and 52 John St. New York, January 18, 1875.

> The subscriber will continue to conduct the busi ness of importing, manufacturing and dealing in every variety of Railway, Machinist and Engineers' Supplies at the old store, 50 and 52 John St., New York. New price list now in press.

> > W. C. DUYCKINCK.

Wanted to Manufacture

Articles of Hardware either of Brass or Iron. For further information

W. F., Address. Office of The Iron Age, 10 Warren St., N. Y.

Wanted,

Hardware or similar goods to sell on commi to the jobbing trade in the Northwest. First-class references furnished. Address Traveler, Care

To Manufacturers of Agricultural Implements.

We can furnish at very moderate cost, machine

Patent adjustable dies cut 16,000 bolts without varying from exact size of the tap. Fine taps and dies a specialty. The Lightning Screw Plate.

WILEY & RUSSELL MFG. CO.,

Screw Cutting Machinery Tools, Greenfield, Mass.

A business man, with many years' experience, wishes to connect himself with a well established wholesale house or manufacturing interest where his capital and services would meet a fair return Iron, metals &c. preferred.

C. B., P. O. Box 3256, New York.

chine Shop and Foundry.

A rare chance for purchasing a part of or whole half interest in the oldest engineering, mechanical and manufacturing establishment in the South.

The shops are the largest south of the Ohio river. and situated in one of the rapidly increasing towns of Tennessee, and in the midst of the coal, iron and stocked, running full time, with a good business e tablished. Cash capital required, \$30,000 to \$40,000. Address, in first instance,

Office of The Iron Age, 10 Warren St., N. Y.

NEW BUSINESS.

out of the burning buildings before death, but cles, staple hardware preferred, of wood or iron. Greenfield, Mass.

Wanted,

A situation as bookkeeper or cashier of an iron works, a hardware business, or in the coal trade, which the advertiser understands in all its branches. Highest references of character, capacity, &c.

Office of The Iron Age, 10 Warren St., N. Y.

A. PURVES & SON, Corner South & Penn Streets, Phila., Dealers in

Scrap Iron & Metals, Machinery, Tools Shafting & Pulleys, Steam Engines, Pumps & Boilers, Copper, Brass, Tin, Babbit Metals, Foundry Facings. Best Quality Ingot Brass.

Cash paid for allkinds of Metals and Tools.

HARDWARE.

FOR SALE in the best business part of Jersey Established about 25 years, and doing a fair business. H. LUTIGEN. Apply to

57 Montgomery St., Jersey City.

Wanted,

By an experienced man, who has a large acquaintance with the wholesale and retail hardware and house-furnishing merchants thoughout the West, a position as traveling salesman. Can furnish good city references. Address, P. A. C., Office of The Iron Age, 10 Warren St., N. Y.

Special Notices. PARTNERS WANTED.

More working capital needed, Grounds, Shops Tools and Machinery, all in good working order. rare chance for parties desirons of engaging in the D. WHITING, Address,

Ashland, O.

THE Fletcherville Blast Furnace Co., Manufacture CHARCOAL PIG IRON.

Exclusively from New Bed Pure Magnetic Ore, suitable for Bessemer, Malleable and Car Wheel purposes, or for foundry use where very soft and strong

| Iron is required. | Analysis of Average New | Bed Purs Ore. | Metallic iron. ... 68-240 | Oxygen with iron. 26-910 | Water ... 380 | Insoluble silicons | matter ... 4-320 | Suiphur, practically none | Pho-phorus ... 038 | Alumina ... 9280 | Lime ... 140 | Metallic iron. ... 94-88 | Lime ... 140 | Curderiermined mat. | 140 | Metallic iron. ... 94-88 | Lime ... 140 | Metallic iron. ... 94-88 | Lime ... 140 | Lime | 14 iron is required. .592

Witherbees & Fletcher,

Port Henry, Essex Co., N. Y. Furnace at Fletcherville, near Mineville, N. Y.

Merchant Iron or Nails

Wanted in exchange for 300 tons No. 1 Wrought Scrap Iron.

GILCHRIST & GRIFFITH.

Mount Pleasant, Iowa EUGENE BISSELL, AUCTIONEER

By BISSELL & CO.,

Successors to R. T. HAZELL & Co., Store No. 94 Rendo Street.

REGULAR SALES OF HARDWARE, CUT-LERY, FANCY GOODS, &c., will be held on TURF DAYS and FRIDAYS throughout the sessor CASH ADVANCES made on CONSIGNMENTS with

McHaffie Direct Steel Castings Co. STEEL CASTINGS,

STEEL CASTINGS,
Solid and Homogeneous, guaranteed to stand a Tensile
Strain of 25 tons per aquare inch. An invaiuable substitute for expensive WROUGHT IRON FORGINGS or for Iron Castings, where great strength is required. Office, cor. Vegling and Levant Sts.,
PHILADELPHIA.
Send for Circular and Price List.

Charcoal Blast Furnaces. Raving during the past 10 years constructed and put in operation a number of the most successful Charcoal Blast Furnaces in the country, and having *c competen corps of workman constantly in my employ, I am enabled to offer advantages in constructing or remodeling upon the latest and most approved plans.

Examinations of Furnace Property made and reported upon when solicited. Correspondence promptly attendance are constructed to the construction of the construct

92 W. Alexander St., Rochester, N. Y.

MANUFACTURERS

desirous of introducing their goods to the British and Continental Markets, are advised to insert advertisements in the newspaper "IRON," published every Saturday, at 99 Cannon Street, London, E. C.

SCALE: First 3 lines, 3/; every additional line, 10d. Price, 6d. per Copy, or 30/ per annum, inclusive of postage to the United States.

An iron worker of large experience in this country and England, with the best testimonials as to character and capacity, wishes an engagement as mana ger or foreman of a mill or forge. Has had 20 years experience in the manufacture of bars, hoops, plates, sheets, and puddle steel.

Office of The Iron Age, 10 Warren St., N. Y.

Salesman Wanted

To sell a leading Hardware article on commission to the trade of the Middle States. Liberal commissions and prices.

Address. Office of The Iron Age, No. 10 Warren St., N. Y.

Hardware Salesman Wanted.

Who can control a hardware trade in New York, ennsylvania, Connecticut or Vermont

Address. V. & R.,

Office of THE IRON AGE, 10 Warren St., N. Y.

An Experienced Mechanical Engineer. familiar with estimating and designing Propeller and general Marine Machinery, Locomotive, Corporation Pumping Engines, &c., will shortly be disengaged. Would like a superintendency or charge of drawing room.

Address, for reference, 114 Fulton Street, N. Y.

SPECIAL NOTICE.

I have three patents for Dies, Machinery, and Tools or making Augers and Bits, each running seventeen for making Augers and Bits, each running seventeen years; dated as follows: Dec. 19, 1865; January 31, 1866, and July 3, 1866. There is a special claim on each of the Dies. All persons in-following on said natents will be held responsible to ringing on said patents will be held responsible he extent of the law. Russell Jennings. Deep River, Conn., Sept. 7, 1874.

Business Chances. HARDWARE.

A man with from \$15.003 to \$25,000 cash, can con-ect himself with an old established Commission and obbing House in Boston, where capital is only re-ulred to extend the business. Address in full ame.

P. O. Box, 3205, Boston.

A PARTNER WANTED

by the 1st of January, 1875, in an established Hardware business, who can put in from \$20,000 to \$25,-600, either cash, or stock suitable for jobbing trade. For particulars, address, B.,

Office of The Iron Age, 10 Warren St., N. Y.

Special Notices.

MERCANTILE AGENCY.

For the sale of Hardware or any Mercantile Business. Stores of all kinds for sale and wanted. Parties desirous of going into business cannot do better than to address this agency. Also clerkships secured, best of reference required. Parties wishing clerks or assistants, please address this agency. Those seeking situations inclose \$1 for registry fee, which also entitles them to three months' registry, if not successful on arse application.

dress, JOHN J. HARING, Box 1633. Binghamton, N. Y.

for Sale.

MACHINIST TOOLS FOR SALE CHEAP.

Owing to the removal of our factory, we will at once dispose of such tools generally found in a firstclass machine shop. Send for catalogue and prices.

Parties desiring to start a jobbing shop can find no etter location and easy terms. Address

SUPT. BURRITT.

330 Delancy St., New York.

For Sale or Rent.

Hibernia Iron Works.—This property is situated in Chester county, on the Wilmington an Reading Railroad, four miles north of Coatesville it consists of a rolling mill for making flue or boiler plates; a forge with four fires and run-out fire girst and saw mill; also farm of about 300 acres with fine mansion house. Will be sold or rented parate or together, on easy terms to a good fenar Apply to James H. Bull, West Chester, Pa.

For Sale.

An extensive deposit of Iron ore, (Red Hematite) uperior quality, 21/4 miles from Selma, Rome and Dalton Railroad, in Shelby county, Alabama. Speci nen sent on application. Terms, \$3000, cash. James T. Leeper,

IMPORTANT To Bridge Builders & Contractors

for Iron Work. FOR SALE,

About 20,000 pounds of Patent Rolled Hexagon Nuts, reamed and chamfered for Bolts from 1% to 1% in. diameter, at a very low price.

JOHN McANERNY & CO., Railway & Steamship Supplies,

PUBLIC SALE

63 BROADWAY, N. Y.

Of a Valuable Iron Property In Augusta County, Virginia.

The undersigned Commissioners, in pursuance of a decree of the Circuit Court of Augusta county, Virginia, in three Chancery causes (brought on to be heard torether), in which Denmead & Son, Raymond & Campbell, and Eyler, Cooper & Co., are respectively Plaintiffs, and the Buffalo Gap Iron and Steel Company and others, Defendants, will sell at public auction, on

Wednesday, the 3d day of March, 1875.

at BUFFALO GAP, in the afforsaid county, all the REAL ESTATE

of above named company. Said Real Estate en

MINERAL LAND, TWO VALUABLE IRON FURNACES

thereon; and a FARM of about 600 aeres. These two parcels of Land will be sold separately.

The Mineral tract lies in and around a depression in the North Mountain range, through which the Chesapeake & Ohio Railroad passes, known as Buffalo Gap. The veins of ore on this land have been but partially developed, owing to the fact that the Farnace heretofore operated on it was plentifully supplied with good ore from the neighborhood, delivered at the furnace, at an average price of \$2.50 per top.

per ton.

Competent mineralogists and miners, who have examined the openings made on the property, express the opinion that ore exists on it in very large quantities.

There are quarries of good limestone on the land:

There are quarries of good limestone on the land; and much of it is well timbered.

and much of it is well timbered.

THE FURNACES

are immediately on the Chesapeake & Ohio Railroad, in the great Iron Region of Virginia, and about 150 miles from the Ceal Fields of West Virginia, which are traversed by said road. They are ten miles west of Staunton and 147 miles west of Richmond.

FURNACE No. 1 has been in blast for several years, and has operated well. No. 2 is entirely new, indeed not quite complete: but the miles were. years, and has operated well. No. 2 is entirely new ndeed not quite complete; but the materials for its completion are on hand and the work can be done

indeed not quite complete; but the materials for its completion are on hand and the work can be done in a few days.

Each of them has an Iron Jacket Stack, built on Iron columns. No. 1 is 38 feet high and 9 feet across the bosh, to which is connected a Player Hot Oven. No. 2 is 40 feet high, 10 feet across the bosh, with a Raymond & Campbell Hot Oven.

There are three Cylinder Boilers, 40 feet long, three feet in diameter, and in excellent condition; a 60 horse power engine with two blowing cylinders, capable of making 7 lbs. of blast to the square inch, and in complete order; two waters ands with a capacity of 60,000 gallons, supplied from a never failing stream; a steam fire donkey engine, connected with several hundred feet of gum hose; an ample bridge or stock house, casting houses and two calcining kins—in fine, the Furnaces are, in all respects, first-class. Around them is a village of 25 or 30 houses, embracing a handsome and spacious manager's red-dence, offices, storehouses, shops, laborers' houses and a neat chapel.

THE FARM

THE FARM
hereinbefore mentioned adjoins the tract of Mineral
land. It is well watered and timbered; and is very
productive. Improvements consist of a large BRICK
BULLDING, Grist Mill, Saw Mill, Tenants' Houses,
a large Barn, and all the other out houses usually
found on a good farm in the Valley of Virginia.
Parties proposing to buy are invited to examine
the aforesaid property before the day of sale. Mr.
John Tierney, who is in charge of the furnaces at
Buffalo Gap, will take pleasure in showing the property; and the undersigned Commissioners, who may
be addressed at Staution, Va., will take pleasure in
answering inquiries concerning the same.

At the same time and place will be sold whatever
PPERSONAL PROPERTY the Buffalo Gap Iron and
Steel Company may have on their premises at Buffaio Gap.

Steel Company may have on their premises at Paulo Gap.

Terms on which aforesaid property will be sold are as fo lows: Ten per cent of the purchase money will be required in cash, 15 per cent. in four mouths, and the balance in three equal annual installments from the day of sale, with interest from the last named day. For all deferred installments of purchase money, the purchaser will be required to give bonds with approved personal security, and the title will be withheld as ultimate security.

GEORGE M. COCHRAN, JR.,

THOS. C. ELDER.

Commissioners of Sale.

for Sale, &c.

FOR SALE,

Hardware and Stove Store. A good complete stock, doing a cash business, sit crossing of two important railroads. Will sell part cash, balance on good time. Address, A. & F., Box 194, Belletontaine, 0.

MACHINERY FOR SALE

The following machinery, &c., being that recently

wned by the American Rolled Nut & Tube Co.,

at very low prices. Consisting of several sets of ROLLS, HOUSINGS, BED PLATES, &c... for Rolling Nuts, including machines for anishing. 1 train of

8 in. Guide Rolls.

Large quantity of

Rolled Nuts for Bolts, from 1% to 2 in diameter, reamed and burred ready for use. Lot of

STANDING PLATES.

These nuts have been extensively used, and are re garded as equal to any made, and will be sold much under the market value. Will also sell a Fourth Interest in the Patent for mak.

ing these Nuts. It is confidently believed that nuts can be made on this plan cheaper and better than on any other yet adopted, and may be rolled of any length or size that may be required. All of the above machinery is

nearly new and in complete order. For further information, apply in person or by mail to

Metropolitan Iron Works, Richmond, Va. For Sale.

A Zinc Mill, consisting of Rolls, Furnaces, Shears and Tools, all in complete order, ready to non at once. Situated near New York on leased ground. Lease covers buildings, engine and boilers, and is a valuable one, having privilege of extension. For full particulars, address,

Box 2166 N. Y. P. O.

For Sale! Hardware Business

In a growing manufacturing town, one of the best locations in Vermont. Business well established and profitable. Stock about \$10,000, in good order. This affords an excellent opportunity for a party This affords an excellent opportunities.

With small capital to secure a paying business, with small capital to secure a paying business.

Address, W. H. BIXBY & SON, Vergennes, Vt.

LOWE & THOMASSON, Chattanooga, Tenn., Dealers in

MINERAL LANDS Surveys Made and Titles Investigated. Parties desiring information or wishing to purchase ore or coal lands within the States of Tennessee. Alabama or Georgia, are respectfully requested to communicate.

We have For Sale Very Cheap Two of the

Finest Charcoal Properties in America. Brown Hematite Ore, 56 per cent. Metallic Iron, and less than 1-20th of 1 per cent. of Phosphorus. Car Wheel Iron can be made for \$16 per ton Also, 6400 Acres Bituminous Coal

Lands, for which part payment will be taken in Northern Pacific R. R. Bonds.

To Rent. First and third floors—together or separate. Brick building 125x50, well lighted and the best business location in the city. Light power will be supplied if desired, or parties can furnish their own if preferred. Address, with particulars,

H. D. STANLEY, Secretary,

For Sale or Rent on Easy Terms A four story brick factory 48x60 ft. with unfailing water power of about 25 norse-power, auxiliary steam engine of 20 horse-power. Adjoining are office, barn and other outbuildings. Situated near depots of three railways, and lines of boats to New York and Philadelphis. Every facility for manufacturing and getting goods to market at cheapest rates. Apply in person or by letter to either

JOSEPH W. ALSOP, ROBERT N. JACKSON, CHARLES E. JACKSON,

Allentown, Pa.

Middletown, Conn.

FOR SALE. An 8% inch mill train for making Merchant, Band

and Hoop Iron. Will be sold cheap. Apply to W. W. JONES, Near the Lehigh Valley Railroad Depot,

For Sale,

Stock of Hardware, at Lyons, Iowa. New and desirable store, one of the best in the State, doing a good cash business. No better business stand can be found. Location established in 1865. Will be sold on reasonable terms. Reasons for selling, loss

J. B. DOLAN, Lyons, Iowa.

FOR SALE. At Lowest Manufacturers' Rates. GUNS & SHEET ZINC.

Best German and Belgian Brands.



FOR SALE,

contained in Lever's Foreign Directory, and orders are constantly re-ceived in answer thereto. Address.

C. KIRCHHOFF Commercial Editor "El Cronista."

Box 2806, N. Y.

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Trade Report.

Office of THE IRON AGE.
WEDNESDAY EVENING, Jan. 37, 1875. The past week has been dull in the various financial markets, and on the Stock Exchange has wholly subsided. The money market has been easy, with rates to borrowers on call ranging from 2 to 31/4 per cent. Prime mercantile paper is fairly quotable at 41/2 @ 6 per cent.

The bank statement is not so encouraging an exhibit as had generally been looked for. The total reserve has fallen \$946,700, the loss in specie having that much exceeded the gain in legal tender notes. The banks now hold \$18,529,100 surplus reserve, which is a reduction of \$1,009,-095 from last week. The averages of the two weeks compare as follows

Weeks compare as 10110/834

Jan. 16. Jan. 23. Differences.
Loans. \$282,972.70) \$284,328,500 Inc. \$1.358,800

Specie. 23,490,600 20,982,200 Dec. 2,505,400

Leg. Ten. 55,271,900 56,880,690 Inc. 1,538,700

Deposits. \$26,887,500 237,146,800 Inc. 249,300

Circulation. 24,288,900 24,153,500 Dec. 135,400

The gold market has been quite steady, but strong, owing chiefly to the heavy specie export caused by the heavy importations of United States bonds. The following shows the daily range of the premiums:

	Highest.	Lowest.
Thursday	1125	1123
Friday	112%	112 %
Saturday	1125	11236
Monday	112%	112%
Tuesday	112%	112 %
Wednesday	113	1127
Government bonds ha	we been strong,	with a0

sustained upward tendency on the demand of the national banks which, in compliance with the provisions of the new law, are preparing to increase their circulation. State bonds are generally strong. Railroad bonds, especially those of old and paying roads, are in good de mand, and stand high in the confidence of prudent investors. Below we give the closing quotations of governments.

In the stock market the principal dealings have been in Western Union, Lake Shore, Northwestern, Pacific Mail, Union Pacific and Erie. The bighest and lowest of to-day's prices of active shares are given below.

The following tables show the movements in foreign trade for the week:

IMPORT	18	
1873. Total for week. \$10,106,401 Prev. reported 16,630,268	1874. \$4,795,247 14,966,378	1875. \$6,079,348 13,008,536
Since Jan. 1\$26,736,669 Included in the imports	of general	merchan-
dise for the week are good	Qu	ant. Value.

Brass good																		
Bronzes																	4	935
Copper						*												164
Cutlery				 	 		. ,		ĸ								.56	25,309
Guns		**		 			* 1										9	1,795
Hardware																		
Iron, pig.	ton	8					,			. ,						. 2	149	11,825
Iron, shee	t to	ns		 			. ,					 				. ,	.12	1,761
Iron, othe	r, t	on	8	 													.78	3,778
Lead, pig	8			 		٠,										.8	381	6,736
Metal good	18			 					. ,		 					.1	137	12,951
Nails												 					.4	1.069
Needles				 						 							13	3,701
Old metal																		939
Saddlery								×									.2	292
Steel				 											1	.(151	17.886
Spelter													 	8	6		146	4,942
Silverware	3				 ٠.				*			. ,					3	
Tin, boxe	и			 	 									1	9	.3	171	163,519
Tin, 5689	dale	9 .		 								 	2	4	6.	8	62	
Wire																		

EXPORTS EXCLUSIVE OF SPECIE.
1873. 1874. 1875. Total for the week\$4,856,819 \$5,406,967 \$3,611,472 Prev. reported12,554,662 15,374,522 13,132,980
Since Jan 1\$17.411,481 \$20,781,489 \$16,744,402 EXPORTS OF SPECIE.
Total for the week

Total for the week	\$3,682,668 3,944,190
Total since January 1, 1875 Same time in 1874 Same time in 1873	\$7,626,858 2,050,052 5,979,233
Government bonds closed as follow	8:
U. S. Currency 6's	Asked. 119% 119%
U. S. 6a. 1881, cou	119% 115% 115%
U. S. 5-20 1864, con	117% 119% 119%
U. S. 5-20 1865, reg. new	1183

•	Th	e f	ollov	ving	V	re	re	,	th	e	h	lg	hes	t and	lowest
			1881, 1881,												11434 115%
			40 co												116%

rices of stocks to-day:	201100
prices of stocks to day.	
Highest.	Lowest
N. Y. Cen. & Hudson Consolidated. 1023	1021
Lake Shore 74%	743
Rock Island	1033
New Jersey Central10732	1073
Delaware, Lackawanna & Western 108%	1083
Michigan Central 79	79
Ill nois Central 983/	98
Wah ush 15%	144
Western Union Telegraph 73%	721
Atlantic and Pacific Telegraph 25%	25
Northwestern 44%	444
44 Pref	593
Milwaukee & St. Paul	353
" Pref 5834	58
Pacific Mail 34 %	341
Erie 29	243
Ohio & Mississippi 28	263
Union Pacific 371	863
C., C. & Ind. Central 8%	83
Atlantic and Pacific Preferred 15	149
Missouri Pacific 4734	473
Hannibal & St. Joseph 21%	21
Quicksilver 33 14	835

GENERAL HARDWARE.

There is little difference in the condition of the market for General Hardware this week. compared with last. A few of the large Western buyers have arrived, and business is generally reported improving; it is too early, however, to expect any general activity.

There are no changes to notice in the values of Foreign Hardware. Prices continue steady, and the demand shows a slight improvement over last week.

Hermann Boker & Co. have added to their Gnn department a full assortment of gunners'

material for repairing, etc. They have recently issued a circular calling the attention of the trade to their enlarged and well assorted stock of English and Belgian Breech and Muzzle Loading Gues, Shot Guns and Rifles, Flobert Parlor Rifles and Pistols, as well as a complete assortment of all kinds of Revolvers, both foreign and domestic.

There is a slight improvement in the demand the speculative excitement reported last week for Nails this week, and prices are unchanged. We continue to quote 10d at \$3.40 @ \$3.50, net, according to quantity.

Lloyd, Supplee & Walton, No. 625 Market street, Philadelphia, have issued the following circular under date of 23d instant :

Owing to the unsettled state of the market upon Rowland's Shovels since January 1st, 1875, we this day make our price upon these goods (subject to change without notice) as follows:

should the same reach as within 50 days from date of invoice.

Shovels will be invoiced at 40 per cent, discount if not paid for within 35 days from date of invoice. The amount of the invoice will be drawn for at sight without the extra 2 per cent, eash discount. Soliciting immediate orders by mail, we remain, Yours, truly,

LLOYD, SUPPLEE & WALTON.

Hermann Boker & Co., proprietors of the Trenton Vice and Tool Works, have added to their assortment of Solid Box Vises a second quality Vise, which they offer to the trade at quality Vise, which they offer to the trade at 11½ cents per pound. These goods are not warranted, as they are seconds, but are made No. 65, 4 inch, Polished Bell Metal... 113 70 22:10 of the same materials and with the same care as their first quality. They all contain trifling blemishes but nothing to interfere with the blemishes, but nothing to interfere with their practical working. The manufacturers believe that the introduction of this Vise will fill a want that exists in the trade for a service-able second quality Solid Box Vise. Their first quality Vises are fully warranted.

Barrows, &c., and dealers in Hardware, No. 6 Gold street, quote their goods as follows:

Hart, Bliven & Mead Mfg. Co. have issued Appendix No. 2 to their catalogue. It gives illustrations and prices of a number of new goods of their manufacture, among which we particularly notice a new Gong Bell, which, in No. 121, Jap'd Gate Latches.

St. Louis Gate Latches.

Per doz. St. Louis Gate Latches design, workmanship and material, is stated to be superior to anything of the kind ever presented to the trade. They also illustrate a new New York State Gate Hinges. Nail Drawer and Box Opener, of which they

We have secured the exclusive right to man-We have secured the exclusive right to manufacture a new article recently invented and patented, called the Combined Nail Drawer and Box Opener, which we propose to make of best solid cast steel, and put in market at such reasonable price that no merchant can afford to do without them.

We shall make two sizes, say No. 1 for ordinary use; No. 2, a smaller size, designed especially for drawing small nails from shoe boxes, wine cases, flour barrels, etc.

They will be put up in finished wooden boxes (same as we now pack our Socket Firmer and Framing Chisels), of half dozen each, and be sold by us as follows, at wholesale:

No. 20, Figured Screws				8 8:00
No. 020, Bronze 1	Metal, Packe	d, with 5	crews	\$ 1.00
No. 25, Figured	Enameled, Pa	acked, wit	er doz.	22 00
No. 025, Bronze M	letal, Packed	, with M	r doz.	10.00
Screws		pe	er doz.	27.00
Botton	n, or Foot Spi	ring Bolts		
No. 25, 6 inch, Fig No. 26, 8 inch, No. 85, 6 inch, Jap No. 36, 8 inch,	panned	*****	er doz.	\$6.80 7.65 6.90 7.00
Figured	I Enameled 1	Flush Bol	ta.	
	1 Inch Wid	le.		1
Inch, Per doz		. \$4'70 5'		6.40
Imitation Enan	neled Door H	andles	Patent	ed.

6	Per doz \$4.70 5.25 5.75 6.40
ì	Imitation Enameled Door Handles Patented.
Š	For Either Right or Left Hand Doors.
	No. 9, Imitation Enameled, Packed, with Screwsper doz. \$3 in
6	Oblique Store Door Handles Patented.
6	For Either Right or Left Hand Doors.
t	No. 8, Imitation Enameled, Packed, with Screwsper doz \$9-7
	Ob ique Store Door Handles Patented.
	For Either Right or Left Hand Doors.
3	No. 13, Imitation Enameled, Packed, with Screwsper doz. \$7:2
ì	Oblique Store Door Handles.
	With Reversible Mortise Lat h, for either Right of Left Hand Doors.
	No. 280, Fig. Enam., Pack., with Screws 3 set \$2.00
6	Shelf Brackets.
6	No. 20, Figured Enameled, Packed, with Screws

With Reversible Morti	e Lat h, i	or either I	dight or
No. 280, Fig. Enam., Pa	ck with S	crows 10	nt #9:00
			ict \$4.00
Shel	Brackets		
No. 20, Figured Enan	neled. Pack	red with S	POWG
Per pair \$0.65	0.88	1:50	
Inch 4x6	6x8	8x10	2.00
No 20 Planned From		OXIU	9x19
No. 30. Figured Fnan	nered, Paci		
Per pair \$0.65	0.88	1.50	2.00
Inch 4x6	6x8	8x10	9x1:
No. 35, Imitation Ena	meled, Pac	ked, with 8	crews.
Per pair\$0.65	0.88	1.50	2.00
Inch 4x6	6x8	8x10	9x1
Figured Enameled	Dilinah Da		
No. 200, Figured Ena	meled, Pa	eked, with	
Screws	Pe	er dozen pai	rs \$5.00
Imitation Ename			
No. 70, Imitation Enai	neled, Pa	cked, with	
No. 90 Imitation Enam	eled	At Bran	8:0

Figured Enameled Bird Cage Hooks. 30, 8 in. with Wrought Iron Screw. @ doz \$2.5 20, 8 in. " Plate..... 2.5 Swinging Bird Cage or Hanging Basket Hooks.

No. 1, 8 inch, Jap'd Fire Pail Hoo'ss... per doz. \$4.00 Chandelier Hooke.

4 inch Screw, Japanned....per doz. \$2.00 4 '' Imitation Enam'd 3.25 4 '' Figur d Enam'd 4.50 arti iles, consisting in part of all kinds of gun No. 3, Japanned, Extra Heavy.....per doz. \$2.00

No. 319, Imitation Enameled, with Iron Knobs Packed with Serewsper doz.
 Packed with Serews
 per doz.
 \$3.75

 Figured Enameled Match Safes.
 per doz.
 \$5.00

 No. 25. Figured Enameled
 per doz.
 \$4.00

 No. 15.
 per doz.
 \$4.00

 No. 20.
 "4.50

No. 20,

Connell's Patent Trip Gong Bells.

No. 15, Bronzed Steel.

Per doz. \$6:80 8:50 11:90 17:90 23:80 34:90 59:50 102:00 Inch... 3 4 5 6 7 8 10 12

Per doz. \$13:60 17:00 23:80 34:00 50:50 102:00 for Wilson & Shober, proprieters of North Carolina Handle Works, offers, from stock a full assortment of Axe, Pick, Sledge, Hatchet, Hammer and other Handles, at prices that will compare favorably with any similar goods in the market. All their goods are made of

Per doz. \$57.80 8 10

Per doz. \$57.80 8 10

Inch. \$57.80 B 10

Connell's Patent Alarm Door Bells.

Per do Bronzed Steel Per do Sash Fastsners.

Packed with Screws......per d No. 155, Bronze Metal.... Figured Enameled Sash Fasteners.

Imitation Enameled Cupboard Latches.
Either Right or Left Hand.
No. 340, Imitation Enam'd, Iron Knobs, Packed with Serews.
No. 345, Imitation Enameled, Metal Knobs, Packed, with Serews.
Der doz. \$2.20
No. 350, Imitation Enameled, Porcelain Knobs, Packed with Serews.
Der doz. 2.25
Spring Door Buttons—Patented,
No. 10, 14 ich, Jap'd Door Buttons, \$2 gross, \$4.75
No. 12, 2 Wrought Iron Window Spring Bolts. Wrought Iron. Enameled....pergross, &

Cast Brass Screw Pulleys.\$2.00 2.20 2.40 2.60 3.20 New England Gate Hinges.

Screw End Whiftetree Tips. No. 1, Sil'r Pit'd Whiffletree Tips. & doz. pairs, \$7:50 No. 1, Gold Pit'd Club Handles. Spindles all Made Usual Lengths.

above list prices. DISCOUNT SHEET, -- APPENDIX No. 2.

age. Discount	t.
L. Letter Plates	of.
Bot, Foot or Spring Bolts, Nos. 25 and 26, 60&10	ď.
Nos. 35 and 26.65&10	%
Enameled Flush Bolts 60	E
Door Handles, No. 9	2
No 8 70&10	4
No. 18	ď.
No. 280 65&10	4
Shelf Brackets, No. 20	a
No. 30	2
No. 35	2
Draw Handles, No. 200	1
and 11. Hat and Coat Hooks	2
Bird Cage Hooks	A.
3, " No. 4	2
Fire Pail Hooks, No. 1	6
Chandelier Hooks60	ď.
, Barn Door Pulls, No. 3	8
Socket Scratch Awls, No. 340	4
	5
Catches, all kinds	
Cupboard Turns	ď
Match Safes	
and 21, Door Bells	8
Boot Jacks 60	4
Boot Jacks 60 Sash Fasteners, Nos. 135, 140, 145. 60&10	ď.
Nos. 150 and 15555	1
	4
Cupboard Latches 60&10	T
Door Buttons	4
Window Spring Bolts60	Œ.
	4
Gate Latches	4
N. E. Gate Hinges	爱
N. Y. State Gate Hinges	g'
Sash Rollers 60	45

 25, N. Y. State Gate Hinges
 60&10 \$

 25, Sash Rollers
 60%

 2t and 27, Carriage Bands, Electro Silver Plated
 20&5 \$

 Do. Nickel Plated
 45&7 \$

 Do. Gold
 25&5 \$

 27, Whiffletree Tips
 50&5 \$

 28 and 29, Club Handles
 5 &10 \$

 30, Shovel and Tongs Stand
 60 \$

 31, Nail Puller
 net
 Co., have handed us the following circulars:

PROVIDENCE, R I., January 20, 1875.
Having recently erected a new mill and improved our facilities, we are now prepared to furnish the several patterns of Horse and Mule Shoes manufactured by us. We shall, as heretorice, use only the best selected scrap from. The complete process of hammering that our shoes receive, give them a hardness equal to ar hand work, and this, with the special attention ial to any

PROVIDENCE, Jan. 20, 1875
We shall not be prepared to issue our usual circular on the 1st of February next, and shall defer the same until after the 1st of March. In the mean time there will be no change in

price.
We trust that this course will be satisfactory to our customers, and they will favor us with their orders as usual.
RHODE ISLAND HORSE SHOE CO.

for Wilson & Shober, proprieters of North
Carolina Handle Works, offers, from stock a ones. That which calls special attention is the markets. We are informed that this company have a large and growing trade in th Australian and German markets. These goods are advertised on 10th page.

We invite the attention of the trade to the advertisement of Hogan & Clarke, which will be found among "Special Notices" on the 16th page. These gentlemen, formerly members of the late firm of Hogan, Clarke & Sleeper, have formed a copartnership under the above style, and will continue the jobbing Hardware and commission business at No. 105 Broad street, Boston. They call attention to their large stock of Washoe Tool Mfg. Co,'s Picks and Eyes, which they will close out at a low price.

BRITISH IRON MARKET.

(Specially reported by cable for The Iron Age.) WEDNESDAY, Jan. 27, 1875.

Scotch Pig.-During the week the quotations for maker's Iron have gone up several shillings per ton over the figures last quoted by cable, and the market is now firm at the rise. apparently owing to a genuine shipping demand, the returns for last week showing a considerable increase over the corresponding period of last year. The following are maker's

Gartsherrie No. 1 Coltness No. 1 Glengarnock No. 1 Eglinton No. 1

Manufactured Iron .- Since last report No. 15, Width of Plate, 1 inch, Jap'd..per doz. \$1.00
No. 15, " 1½" " 150
No. 15, " 1½" " 150
No. 15, " 1½" " 150
No. 15, " 150
No. 15, " " 1½" " 150
No. 15, " " 150
No. 15,

Rails .- There is no change to note in the market, and quotations remain for Welsh at £6.

Ikon.

American Pig.-The late advances have been maintained, and makers still show no in-clination to contract for future production while stocks on han l are almost all exhausted. There is, however, no disposition on the part of consumers to anticipate their wants, and transactions have not been large. The position in regard to the Coal strike is about as it has been for some weeks, and it is impossible to make any calculation as to the future. We The following are the discounts from the quote \$27 @ \$28 for No. 1 Foundry, \$25 @ \$26 to No. 2 Foundry, and \$23 @ \$27 for Gray Forge, which is particularly scarce. It will be noticed that our reports from other markets all speak of an improved feeling.

Scotch Pig .- The market continues much as last reported, and we quote without change:

before, American at mill, \$50, currency; Welsh, \$49 @ \$50, gold. Some small transactions have been reported, but nothing of importance.

Old Rails .- In the absence of transaction we continue our quotation of \$28 @ \$30, which, however, is wholly nominal.

Scrap .- The stock is held at \$35, which price seems to be firm.

METALS.

Copper.-There have been sold during the week 300,000 pounds Lake, on the spot, at 211/c., in part for export. No more sellers at this price can be met with, the asking rate being 21%c., and even at this figure no more than 50,000 pounds could be procured. An offer for 100,000 pounds at 21%c., by telegraph, made to a Boston helder, was declined this morning. We quote the market 21%c. @ 22c., for Lake, and nominally quote Baltimore 231/2c., the ask-Horace Durrie & Co., No. 97 Chambers in price. The manufacturers do not buy at street, agents for the Rhode Island Horse Shoe present; the moment they recommence operations on a more extensive scale, Copper will not unlikely return to what it was worth at the close of last year. It is in few and strong hands, and the outlook for the spring is a fair one as regards the metal trade. Europe may decline, as we have said in our last report, to a lower range, but it can affect the metal but little here. The moment we give way here behand work, and this, with the special attention given to the creasing, and to puncting the nail holes, and to the uniformity of shape, enables us to offer to the public a shoe equal to any made by hand, and superior to any machine shoe in the market. In addition to cur well known Perkins and Rhode Island patterns, we call particular attention to our new City Pattern, and also to the Perkins Snow Shoe.

The City Pattern is of the same style as the same style

be but a repetition of 1874, merely because the first month of the year chances to be unusually dull. Taking Liverpool, Swansea, London and Havre together, the visible supply of Copper on the 1st instant was the following: 29,812 tons against 36,115 in 1874, and 42,325 in 1873. The following have been the imports: 1874, 57,576 tons; 1873, 52,755, and 1872, 61,436. while there were delivered 65,662 last year. ones. That which calls special attention is the rapid increase in the deliveries of about 8500 tons the previous year, and 9000 during the season just closed. Manufactures of Copper are sustained as follows: New Sheathing, 28c.; Belts and Braziers, 30c.; Bronze and Yellow Metal Sheathing, 21c. @ 22c.; and Yellow Metal Bolts, 28c., net cash.

Tin.-This metal has remained inactive, othing beyond a small jobbing trade baving nothing beyond a simil joboling trade baying transpired therein on the spot, nor have there been any transactions "to arrive." We quote Straits 22½c., gold; L. & F., 21½c.; English Refined, 22c., and Banca, 26c., all gold. By cable we have Singapore, ye terday, \$25 per picul for Malacca Tin, and London came on Fridry, £100 for L. & F. A series of private letters has been shown to us, all from the pen of one of the best Tin statisticians and nerchants in the Singapore trade at London, written for the last four mails arrived. The opinion he expresses is the reverse of sanguine, and he inclines to the belief that Straits Tin in the more immediate future will sooner range near £90 than near £100. He says that large shipments will be made from countries in the East, including Australia, in January and February, and that unless there should be some considerable increase of consumption somewhere, which he cannot see, speculators will find it difficult to uphold ruling rates, which were about £95 for Straits Tin at the time the last letter was written, some three weeks ago. Having been struck with the soundness of views generally pervading the letters of this merchant, we should not be surprised if his opmion transpired therein on the spot, nor have there Having been struck with the soundness of views generally pervading the letters of this merchant, we should not be surprised if his opinion proved correct also in this instance. Tin Plates.—Although the great movement is December has proved a partial failure, and more than a disappointment to most of the operators, we have remained tolerably firm, with sales of 3000 boxes during the week, all in a jobbing way. We quote: I. C. Charcoal, \$10, gold, per box; Charcoal Terne, \$8724/2/6/89; I. C. Coke, \$8; and Coke Terne, \$7121/2/6/8750, all gold.

Lead.—Sales have amounted to 150 tons

185; and Coke Terne, \$7.12.5 (@ \$7.50, an gold.

Lead.—Sales have amounted to 150 tons Domestic, at 6c. @ 6 1-16c., gold, and a lot of some former importations, fine German, for White Lead purposes, at 65c., gold, which is a cheap price. Ordinary Foreign is worth 65c., gold. Lead is reported weaker in Europe. The Span ards seem to be on the eve of a settlement, and various mining enterprises in the Peninsula have begun to look up all of a sudden. Thus Quicksilver, which had been hampered by identical political causes, has begun to decline, now that the mines commence to produce at the old rate. At all events, we perceive from our

tical political causes, has begun to decline, now that the mines commence to produce at the old rate. At all events, we perceive from our French exchanges that Lead is getting uncomfortably abundant at Marselles, where it is nominal and stagnant. The manufactures of Lead are sustained here on the basis of \$3\(^2\)c., less 10 per cent. to the trade.

Spelter and Zinc.—Domestic has now declined to a figure where it ought to attract the attention of capitalists for investment, having been forced upon the market to the extent of 50 tons, which sold at 6\(^3\)c., curreacy, there being no demand for it, and it would not bring over 6\(^3\)c., currency, to-day. Now, everybody knows full well that it cannot be produced at anything like this, that the companies, if they should be compelled to go on selling at such a low figure, would go to the wall one after the other; in other words, the Domestic metal "goes begging," due to some bad management, no dou't, as regards the disposal of it here on the coast. The critical moment, when production will be curtailed out at the West by the ruinous result it entails, seems to be near at hand. While this anomaly is going through its apparently last stages, we have Foreign here as firmly sustained as ever at 7:10c. @ 7:37%c. as last reported, and we quote without change:
Coltness, \$37 @ \$38; Glengarnock, \$36 @ \$37;
Egiinton, \$34 @ \$35. Some sales of Coltness to arrive have been made on terms we could not learn.

Rails.—There is nothing new in Rails, either American or Foreign, and we quote as before, American at mill, \$50, currency; Welsh,

COAL.

in the condition of the Coal market this week Business remains very quiet, and there is hardly any thing doing to stimulate the demand. hear that in some of the collieriers of the Wyoming and Shamokin regions, a large portion of the men are at work at the reduced rate of wages. It is anticipated that those in the Schulykill and Lehigh regions will not hold out much longer after the others start.

The quantity sent by rail for the last week from the Schuvikili region was 1757 tons against 20,872 tons for the corresponding week last

The supply sent from all the regions for the week was Anthracite, 75,896 tons, and 58,757 Bituminous-114,653 tons against 172,287 for the corresponding week last year. Decrease, 57.624 tons.

The whole supply sent so far this year is 961,167 tons, against 1,015,403 tons to corres ponding period last year : decrease so far 54,237 tons, of which 43,728 tons is Anthracite.

The suspension in the Schuylkill region con tinues the same as heretofore, as the quantity sent from this region indicates.

The usual monthly sale of Scranton coal took place to-day (Wednesday). The following

effected.

There is very little doing in the market for Bituminous Coal, and prices are nominally unchanged. Our quotations are as follows: Cumberland, \$6.75 @ \$7; West Virginia, \$7.25; American Gas, \$7 @ \$7.75; Pennsylvania and Westmoreland, \$6.75; James River Steam, \$6.25 @ \$6.50; James River Carbonite, \$9 @ \$9.50 : American Canal, \$12 @ \$14.

Foreign Coal continues to rule quiet, and prices remain unchanged. We quote: Liverpool House Canne', \$18; Liverpool Gas, \$11; Newcastle Gas, \$8; Scotch, \$8; English Cannel, \$17 @ \$18.

The Coal transported over the Cumberland Branch Railroad during the week ending Jan. 23, 1875, amounted to 473 tons, as against 1764 tons shipped in the corresponding period of last year, showing a decrease of 1291 tons. Over the Cumberland and Pennsylvania Railroad, for the same period, the shipments were 15,086 tons, against 19,997 tons shipped in 1874; a decrease of 4911 tons. The aggregate amount companies so far this year amounts to 59,349

Tons.	Pennsylvania R. R. Cumberland Branch. Pennsylvania R. R. Cumberland Branch. By Pat. Total. Total. Total. Total. Total. By B. R. C. By B. R. C. Total. 1,003,964 60,861 194,354 264,118 257 22,021 1,918,514 26,566 202,666 220,152 247,347	Tons.
	Pennsylvania R. R. Cumberland Bra. R. R. Cumberland Bra. P. Pa. R. Dot. By P. Dot. Tot. Tot. Tot. By R. C. C. By R. C. C. By R. R. Tons. Tons. Tons. Tons. Tons. Tons. 1,469,707 114,409 88,941 857 22,021 1,918,514 26,529 89,755 127,828 880 67,671 1,944,992 113,670 133,182	Pennsylvania R. R. Cumberland Bra. R. R. Cumberland Bra. P. Pa. R. Dot. By P. Dot. Tot. Tot. Tot. By R. C. C. By R. C. C. By R. R. Tons. Tons. Tons. Tons. Tons. Tons. 1,469,707 114,409 88,941 857 22,021 1,918,514 26,529 89,755 127,828 880 67,671 1,944,992 113,670 133,182
	Pennsylvania R. R. Pennsylvania R. R. Pennsylvania R. R. Ponsylvania R. R. Ponsylvania R. R. Ponsylvania R. R. 100 114,569 9,765,579 100 114,569 9,765,579 100 114,569 9,765,579	Pennsylvania R. R. Pennsylvania R. R. Pennsylvania R. R. Ponsylvania R. R. Ponsylvania R. R. Ponsylvania R. R. 100 114,569 9,765,579 100 114,569 9,765,579 100 114,569 9,765,579
Tons. 1,995,514 114,589 9,965,579 67,671 1,984,592	98 78 78 98 Pen	98 78 78 98 Pen
77 By Pa. R. 77 Pa.	Pen 196 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Pen 196 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

IMPORTATIONS.

Of Hardware, Iron, Steel and Metals into Port of New York, for the week end-375 :

Barton, Alexander & Waller, Wire, cks., 6
Colby J. L. & Co, Wire, bdis., 156
Drexel, Morgan & Co, Bare, 1161
Naylor & Co, Tires. 30

Ackerman J. H. & Co. Antimony, bxs., 121 Byrne Joseph & Co. Tin ingots, 126 Mose, pkgs., 95

Tin, slabs, 370 epard Sidney & Co. Tin plates, bxs., 184

Hardware.	
Boker Hermann & Co.	Orgill Mr.
Mdee. pkgs., 17	Pig, tons, 10 Phelps, Dodge & Co.
ryce Wm. & Co.	Phelps, Dodge & Co.
Cases, 1	Bundles, 507
egraw, Aymar & Co.	Rionda Benj. & Co.
Chains, pcs., 4	Scrap, tons, 50
Packages, 5	Seligman J. & W.
Packages, 5 rasse P. A. & Co.	· Spiegel, cks., 3
- Casks, 2	pcs., 5
ield A. & Co.	Order.
Mdse. pkgs., 17	Bars, 20
Casks, 9	Pig tons, 500
Chains, cks., 38	
Cases, 1	Steel.
Nails, bags, 2	Barton, Alexander &
Cases, 1 Nails, bags, 2 Hutchinson J. W.	Waller.
Guns, cs., 1	Wire, cks., 6
Guns, cs., 1 Harmar Wm. & Co.	Colby J. L. & Co.
Packages, 3	Colby J. L. & Co. Wire, bdls., 156
Kittridge B. & Co.	Drexel, Morgan & Co.
Arms, cs., 6	Bare, 1161
an & Gartichs.	Naylor & Co.
Mdse. pkgs., 6	Tires, 20
Arms, cs., 35	Cases, 3
wire, bdls., 2	Prosser Thos. & Son,
ennov E B	Tire forgings, 36
ennox E. S. Bale ties, bdls., 592	Bundles, 122
Mason John W. & Co.	Sanderson Geo. & Co.
Wire rope, coils, 6	Bundles, 128
Inseell & Erwin Mfg.	Casks, 8 Wilder W. F.
Co.	Wilder W. F.
Files, cks., 3	Wire, cks., 2
Shepard Sidney & Co.	Order.
Anvils, 13	Cases, 15
Anvils, 13 Seymour W. N. & Co.	Bundles, 640
Casks, 3	Casks, 5
Schoverling & Daly,	Bars, 7
Mdse pkgs 1	**
Schuyler, Hartley & Gra-	Metals.
ham,	Ashaman T II A co
Guns, cs., 4	Ackerman J. H. & Co
Tillotson & Co. Galv. wire, lots, 394	Antimony, bxs., 1
Galv. wire, lots, 394	Byrne Joseph & Co.
Wiebusch & Hilger Hwd.	Tin ingote, 126
Co.	Mdse. pkgs., 95
Canks, 54	Bruce & Cook,
Mdsc. pkgs., 5	Tin, ingots, 300
Order.	Mdse. pkgs., 243
Cases, 1	Tin plates, bxs., 1
Iron.	Dale John G.
Agastine Jose	Tiu plates, bxs., 10
Scrap, tone, 35	Hart Lucius,
Burdett & Pond,	Tin, bbls., 5
Scrap, tons, 41	Tin, ingots, 298
Canadian Bank of Com-	Tin, ingots, 298 Haxtum B.
merce,	Lead, pigs, 4000

merce, Pig, tons, 150 Eggers & Heinlein, Scrap, tons, 45 Hawley M. C. & Co.

Packages, 2

Henderson Bros.
Pig. tons, 100

Laughland & Co.
Hav bands, bdls., 715

Lang W. Bailey & Co.

Bars, 581 Bundles, 270

quantity, twenty-five thousand tons, rapidly for the future are more encouraging than they have been for some time past. Linen Carvas and Canvas Cotton have been very active the past week, and prices are strengthening. Old Metals remain unchanged, and quotations are firm. We quote the following as the current

of Cumberland Coal shipped by the various Metal at the advance noted last week, with con-We have received from the office of the coal troubles, owing to which we hear of sev-ly few furnaces have any stocks of moment. In Manufactured Irons there is more doing, with a fair inquiry for Rails, and better orders for Bars than have been had for some time. We'are informed from city and nearby mills that quotations of 2.3 to 2.5 cents per pound for Bars do not represent their sales, and are only applicable to Pittsburgh or Western Irons delivered here. Sales are now making to stores at 2.8 cents, firm, and some of the larger mills refuse to shade this figure for round lots, while they report much larger orders on hand than at this time last year. In Scrap there have been some, but not large transactions. An error in last week's report increased a sale of 1000 tons to 4000 tons at \$28, while there were several sales at \$29. The market for Scrap bas not sympathized with the advance in New York. although prices are quotably \$2 to \$3 per ton higher. The transactions of the past week, and the condition of the market at the close, indi-cate a fairly healthy business with a slight ad-vance, but no great activity in trade before the opening of navigation. The following prices fairly represent the rates current in this mar-

few of these just now that I can hear of.
QUOTATIONS.
No. 1 Foundry
Gray Forge
Hot Blast Charcoal
MUCK BAR.—There is a continued steady demand for Muck Bar, as the most of the mills are now obliged to buy Muck Bar instead of
making it, and prices are fully sustained, rang- ing from \$40 to \$44, 4 mos., according to qual-

ity.

MANUFACTURED IRON.—Orders for all kinds
of Finished Irons continue to come in sparingly,
and, as a rule, they are mostly for small lots;
however, the mills, as a rule, are getting about an they want in the present condition of affairs very few, if any of them, are soliciting orders, and it is claimed that there is little or no mar-gin for profit at current rates, 2-25c. @ 2-35c. for Bars. Byrne Joseph & Co.
Tin ingots, 126
Mdee. pkge., 95
Tin plates, bxs., 960
Bruce & Cook,
Tin. ingots, 300
Mdee. pkge., 243
Tin plates, bxs., 110
Dale John G,
Tin plates, bxs., 100
Hart Luclus,
Tin., bbls., 5
Tin., ingots, 288
Haxtum B,
Lead. plgs, 4000
Pleips, Dodge & Co.
Tin., ingots, 3764
Tin plates, bxs., 6326
Tin., slabs., 370
Shenard Sidney & Co.

gin for profit at current rates, 2-25c. @ 2-35c. for Bars.

NAILS.—The Nail trade continues very dull, and no material or permanent improvement is expected until about the middle of next month, when both jobbers and consumers usually commence to send in their orders. No change in prices—\$3-15, 60 days—with usual discount of 2 per cent. for cash. The factories here are nearly all stopped, and the stock in first hands is very much reduced, but it is understood that Wheeling is in full blast. Shoenberger & Cotontinue to report a steady demand for Horse Shoes, and that they are working up to their full capacity. Prices unchanged at \$5-25, usual time.

ler. Tin plates, brs., 4076 Tin, slabs, 240 Tin, brs., 63 Lead, pigs, 800 Tin ingots, 600 time.

Schap Iron.—There is a continued steady demand for Scrap Iron. Dealers report that they have no difficulty in disposing of all they can get hold of, but prices remain without quotable change. No. I Wrought Iron Scrap may be quoted at \$28 to \$30, 4 mos. The most OLD METALS, PAPER STOCK, &c.

The market for Old Metals, Rsgs and Paper
Stock is steadily improving, and the prospect

THE LOCK-OUT .- The situation remains un THE LOCK-OUT.—The situation remains unchanged. There have been no end to rumors, most of them to the effect that the puddlers had concluded to accept the situation and go to work at the reduction, but they seem to have had no foundation in fact. There is no question but what many of the puddlers, if left to their own will, would resume work at once, as they feel satisfied that manufacturers cannot pay the old rates, but they dare not do so until it has been ordered by the "union." It is hoped, however, that wiser counsels will prevail, and that the lock-out may soon be a thing of the past.

	100 tons gray forge \$23.00—4 mos. 1.00 tons gray forge 23.00—4 mos. 100 tons foundry private terms.	
И	100 tons foundry	ı
Н	50 tons gray forge	1
,		1
١	MUCK BAR.	1
	500 tons muck bar, Western\$14.00-4 mos.	1
	200 tons muck bar 43:00-4 mos.	1
•	200 toos muck bar 40.00—cash.	1
		1
7	200 tons muck bar private terms.	1
	CHARCOAL.	١

ANTHRACITE. ANTHRACITE.

100 tons No. 3 gray forge, red short, at furnace. \$22.00—cash.
30 tons No. 1 foundry, extra. 28 00—4 mos 20 tons No. 1 foundry. 46.00—4 mos connellsville coke.

higher. The transactions of the past week, and the condition of the market at the close, indicate a fairly healthy business with a slight advance, but no great activity in trade before the opening of navigation. The following prices fairly represent the rates current in this market, viz.:

Pto Inox—No. 1 Foundry, \$27 to \$25; No. 2, \$25 to \$36. Gray Forge, \$24 to \$25, and up to \$27 for some brands.

RAILS—\$30 to \$33.

Old Rails—\$26.

Balls—\$27 to \$28. for city and nearby mills, and 2 3c. to 3c. of the following sales, viz.: Pigrino, 3000 to 4000 tons No. 1, \$200 tons, \$24 at furnace; 3000 tons, \$24 at furnace

	FOL	ge		24 '00	un	-	moe.
Tennessee ?	Vo. 1			26.00	0	27-00-4	mos.
14 I	orge			31.00	0	4	mos.
Alabama No	. 1			26.00	0	27.00-4	mos.
Missouri No	. 1			27:00	0	28:00-4	mos.
" No	. 2			26.00	0	-1	mos.
	HOT	BLAS	T STON	E COAL	fe.		
Missouri No	. 1	9	ton	\$27.00	a.	-4	mos.
" For	rge			25.00	(m)	-4	mos.
Ohio No. 1				25.00	@	26.00-4	mos.
" Forge.				23.00	a	24.00-4	mos.
Scotch Pig,	No. 1			26.00	0	-4	mos.
	COLI	BLA	ST CHA	BCOAL			
Hanging Roc	k Car V	Whee	1 19 tn.:	\$35.00	0	50.00-4	mos.
Missouri	66	44		43.00	0	45.00-4	mos.
Kentucky Tennessee	6.6	6.6		40.00	0	42.00-4	mos.
Tennessee	0.0	6.6		86.00	a	49-00 A	90.00
Georgia	44	8.6		40:00	a	42-00-4	mos.
Georgia Alabama	6.4	4.6		40.00	6	42-00-4	mos.
Machinery as					a	42.00 - 4	mos
Blooms				70.00	0	90.00 -4	mos.

LOUISVILLE.

Messrs. Gro. H. Hull & Co. underdate of Jar.
25, writes us as follows: The market is firm but without change in prices. There is considerable inquiry for round lots for future delivery.
The usual time, 4 mos., is allowed on the quotations below.

Ą		2		**			. 24 Ut	J 6000.	20 00
	45	1 Fors	re.	6.6	6.6		100-01	100	24.00
ì	84			m Alaba	ma Ore	PM.			28.00
ĺ	4.0	1 11	66	Iron !	Mounta	in Ores	. 28'00		90,00
ĺ			51	OT BLAS	T STON	E COAL	te.		
l	No.	1 F dr	y, fro	m Miss	ouri Or		(B) 15 - (3)		30.00
l	86	4 77		94	44	40			28.00
ı	**	1 For	56.	20	40	**	26'0	0 00	27.00
l			C	OLD BLA	AST CHA	RCOAL			
1	Car	Wheel	from	Hangin	g Roel	c Ores.	40:00	00	50.00
		6.6	8.9	Tenne				10	38:90
l		66	86	Alaban					40.00
l		4.6	5.6	Georgi	a Ores		98100		40.00
1		46	66	Misson	m Ores		98-0		40.00
ļ		5.6	6.0	Kentu	cky		30.00		40.00

BALTIMORE.

Messrs. Wyeth & Brother, Iron and Steel merchants, South Charles and Lombard streets, report us the following prices under date of Jan. 26: We are pleased to report a better feeling prevailing in this market, and improved demand resulting from same. Quotation figures rule firm and unchanged, with inquiries much more numerous.

Metals remain the we quote the following as the current purchasing rates:

Old Metals.—Copper, 16c. @ 17c. per lb.; Yellow Metals, Itc.; Brass, 10c. @ 12c.; Composition, neavy, 13c. @ 14c.; Lead, solid, 5½c.; Tea Lead, 20. % 2. % 18c.; do., 3c.; Machinery, 4c., 3c. % 18c.; do., 3c.; Machinery, 4c., 3c.

Baltimore	Char	20	al	F	4	g	1	r	0	n					\$39	00	0	35'00
Varginia	0.0						60								. 80	-00	0	32.00
Alabama	6.0					1	14								98	00	O.	80.00
Anthracite	No.	1.										Ĭ.			97	00	0	28:0
																000	a	26.0
	No.	3.													. 25	00	60	25.0
White and	Mott	le	d.												. 17	'00	0	20.0

FOREIGN.

FRANCE.

SO (cons, soid last week, gary force., \$22.00-4 mor, 10 tons allvery.)

HOSTON.

JAN, 23.—F/6, although quoting higher bounding the first of the control of the soil of the control of the soil of the control of the control of the control of the control of the Anthrectic miners, and the blowing out of small blast furances may be reactioned of the control of small blast furances may be reactioned of the control of small blast furances may be reactioned of the control of small blast furances may be reactioned of the control of small blast furances may be reactioned of the control of small blast furances may be reactioned of the control of small blast furances may be reactioned and the control of the control of small blast furances in a strength of the control of small blast furances in a strength of the control of the control of small blast furances in the control of the control of

BELGIUM. (Le Commerce.)

BRUSSELS, Jan. 9, 1875.—Fron.—Nothing of special interest has transpired, either here or in the Iron districts. Business is not prosperous, and great uncertainty prevails regarding the future. The impression seems to be that we are on the eve of a fresh decline in Pig Iron; some sales are even now rumored at the low figure of 18½ to 19½ frans, which cannot leave much margin to the producer. We are, nevertheless, in bopes that the new year may eventually prove to be a more remunerative one than its predecessor, about the least we think that may be expected. Coal.—The strike at Charlerol has been speedily brought to an end, and we congratulate it both the companies and the miners. C.al bas, meanwhile, remained unaltered, despite the cold weather. While Coal for industrial purposes has been neglected, stove coal has shown a little more activity. Small coal is stagnant still.

Essex county, that has furnished the most perfect is both the companies and the miners. Oad has meanwhile remained unaltered, despite the cold weather. While Coal for industrial purposes has been neglected, stove coal has shown a little more activity. Small coal is stagnant still.

GERMANY.

(Borsenhalle.)

HAMBURO. Jan. 8. 1875.—Metals.—The year has opened rather dull, due in a measure to the English deciline, of which the telegraph has kept us informed and which has had a quieting effect upon the German markets, moreover seldom active the first week of the new year. Copper has been quite inactive at Stettin as well as here; at the former place at 33 to 35 thalers, and here at 115 marks nominally for Minnesora Copper. This has led to no dealings, either here or at Berlin or Stettin; quotations at the three leading points remain nominal and unchanged Lead.—The firmness, for some times past noticeable in the German markets, has not been shaken for a single moment, but the stocks remain at so low and but that the stocks remain at so low and but that the stocks remain at so low and but that the stocks remain at so low and but that the stocks remain at so low and but that the stocks remain at so low and but that the stocks remain at so low and but that Stettin, by telegraph, quotes Spanish 8½ to 9 thaiers. German here commands 24 to 2550 marks: English, 25-20 to 26; and spanish, 25 to 2550 marks: English, 25-20 to 26; and spanish, 25 to 2550 marks: English, 25-20 to 26; and spanish, 25 to 2550 marks: English, 25-20 to 26; and spanish, 25 to 2550 marks: English, 25-20 to 26; and spanish, 25 to 2550 marks: English, 25-20 to 26; and spanish, 25 to 2550 marks: English, 25-20 to 26; and spanish 25 to 2550 marks: English, 25-20 to 26; and spanish 25 to 2550 marks: English, 25-20 to 26; and spanish 25 to 2550 marks: English, 25-20 to 26; and spanish 25 to 2550 marks: English, 25-20 to 26; and spanish 25 to 2550 marks: English, 25-20 to 26; and spanish 25 to 2550 marks: English, 25-20 to 26; and spanish 25 to 2550 marks: E

week to 1500 quintals, "Silesian Union," at an average of 24 25 marks.

week to 1500 quintals, "Silesian Union," at an average of 24.25 marks.

(Handelsbiatt.)

Essux, Prussia, Jan. 7, 1875.—Coal.—At a recent meeting of the members of the Coal league a motion has been carried tending to modify the law which excluded hitherto the employing of minors in the Coal imnes of this vicinity of between 14 and 16 year of age. Should the Prussian Chambers approve of their admission, it is proposed that they shall be placed in the charge of a special foreman, and that their services shall be only accepted upon their producing a doctor's certificate that they are strong enough to perform the lighter kinds of work in the mines. Another subject of interest that come upfor discussion was the projected canal of the Empscher, which is to take its starting point at Dortmund, and while traversing the Northern Ruhr country it is to be carried to the Rhine. Its cost will be 40,600,000 francs. Vessels of 600 tons are to navigate upon it, and will by this inland connection be enabled to reach Antwerp. The project was started last year; it is a most popular one, especially as it is intended to counteract thereby the monopolizing tendencies of our railroad companies, and active steps have been, and are being, taken to procure the required capital to commence operations.

HOLLAND.

(Evers & Co.)
ROTTERDAM, Jap. 5, 1875.— Tin.—Banca, on the

Billiton, 55% to 56.	, now neid	at 08%;
BANCA.		
Deliveries in Dec	1874. Slabs, 10,454 132,039 15,611 119,606 5,085	1873, 81abs, 25,435 150,005 19,658 114,962 6,170
BILLITON.		
Deliveries from Jan. 1 to Dec. 31. Stock on warrants, Dec. 31 Unsold stock, Dec. 31 Private stock	2,967 200 2,953 28,450	1,831 100 8,067 22,658

EAST INDIES.

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EAST INDIES.

(Sanditands, Buttery & Co.)

PENANG, Dec. 3, 1874.—The has remained very steady during the fortnight, a good demand having prevailed for Europe and China. The bulk of the business has been done at \$23.75 to \$23.90 per picul, the latter being the closing price, with a very firm market, and only a small stock available. The arrivals have been on a fair scale—say, 7800 piculs from Junk Ceylon and the neighborhood, and 2900 piculs from Perak and Larote. The demand has been quite sufficient to take off these supplies, 4500 piculs having been bought for Europe, and 5500 for the Eastern markets. The steamer "Galatea" (cleared 26th ult., and took hence for London 400 tons, and the quantity waiting shipment cannot be less than 200 tons. Exchange—4/3%.

(Giffilian, Wood & Co.)

Singapore, Nov. 18, 1874.—Tin.—A purchase was

(Glifilan, Wood & Co.)
SINGAPORE, Nov. 18, 1874.—Tin.—A purchase was reported a week ago at \$24.80 per picui, but buyers now hold off, and the market is weaker. A small purchase is reported at \$24.60. Exports per steamer Tartar to New York, 2151 picuis Tin. Loading the Ringdove for New York, and the Banian for Boston. Exchange—4/3\%. (Aitken, Spence & Co.)

(Aitken, Spence & Co.)

Colonso, Dec. 15, 1874.—Piumbago.—A very moderate demand continues from London, and a slightly better one from the United States, but limite are too low and business generally impracticable, the article continuing very scarce. The Star of Devon, for New York, cleared 6th inst.; took 3116 cwts., all that has been shipped to the United States since Oct. 1, against 13,234 last year. We quote: Lump, 356/, free on board, with commission and exchange at par; freight to New York, 75/ per ton; Chip, 189; and Dust, 130. Shipments to Europe thus far, 14,201 cwts. Another small vessel will soon be !aid up for the United States. Exchange—1/11d.

(Alexander Duff & Co.)

Pont Louis (Mauritius), Dec. 11, 1874.—Galvanized Iron is steady at \$10 the 100 pounds. Tin Plates are firm at \$9.75 to \$10 per box for I. C. Coal is quiet at \$11.25 to \$12 for English per ton. Exchange on London, 60 to 90 days, 9 to 8½ per cent. premium; 30 days, 9½ per cent.

The Lead Market in 1874.

Mr. Edward Caswell, metal broker, of this city, sends us the following valuable review of the lead trade in 1874 :

city, sends us the following valuable review of the lead trade in 1874:

The year 1874 may be justly termed a year of general disappointment. An active spring trade was expected and was not realized. A profitable fall trade was then anticipated as a certainty, but in general dwindled away before the winter set in. The volume of business has not been materially diminished, often the contrary, but low prices, small margins and bad debts have too often rendered the debit side of the ledger at the end of the year unpleasantly conspicuous.

The lead pipe and shot business has been the field of an uncompromising competition, resulting in such a severe reduction in the price of manufactured lead, that orders pressed in from all points and materially increased our local consumption. The white lead trade has been marked by no unusual developments. The price of pure ground lead was advanced January 21st to 11½ cents and reduced again to 11 cents on the 1st of August. The use of American lead for corroding still increases, but rather in the direction of the virgin lead of Missouri than in desilverized brands, the best of which do not yet reach the requirements of our fastidious Eastern corroders.

The supply from Nevada and Utah this year has not been less than last year, while that of Missouri has been greater. The supply from the far West was lessened in the early part of the year, owing mainly to the want of capital and not to any failure of the mines. In fact,

the year, owing mainly to the want of capital the year, owing mainly to the want of capital and not to any failure of the mines. In fact, the reports from some quarters are especially favorable, and we may be astonished any day by the striking of a "Comstock lead vein," with the figures running into thousands of tons. About 250 tons of Mexican buillou reached this point, but no definite information can be given concerning future receipts. The expense of bringing it to the sea board, the import duty, and other items do not leave a wide margin. If, however, the U. S. boundry should be extended a few miles only, so as to include those mines within government jurisdiction, we may get much larger supplies from that quarter. The residents of New Mexico also confirm their oftrepeated statements of large quantities of ore in sight, waiting patiently for a Texian railroad to bring it to Eastern works, and, lastly, the same cry is echoed from the land of the Puritans, and bring it to Eastern works, and, lastly, the same ex county, that has furnished the most perfect specimen of brass now living, is also ducing lead, and the fishermen of Newburn

Francisco; Mr. N. Corwith, of Chicago, Messrs Corwith & Co., of Galena; Mr. F. W. Billing, of the Germania Co., and by the superintendents of the other refining works. The U. P. R. R. has with equal courtesy reported the figures of lead transportation eastward from Ogden, showing slipments of 3500 gross tons of piglead, and 15,000 tons of bullion, which verifies exactly the statistics given independently by the various desilveriging works.

Assuming that the country holds about the same stock on hand now as in January, 1874, these production figures also show our consumption for the past year.

		Gre	es tons	
nported into Ne	ew York er Easte	rn ports	6,250	10 000
S. governmen	t sales.		18.000	18,060
owa, Illinois, W	sconsin		5,500	20,500
(Utah and Ne	vada.)	d loads	8,000	60,000
alifornia (de alt Lake City,	SHVELIZE	u lead)	8,500	
maha,	6.6	44	TO CHOOK	
hicago,	6.6			
Y. Newark, Ph	ila. "	60	6,500	26,000

The U.S. government about the middle of authorized the sale of all its pig lead in June authorized the sale of all its pig lead in store, except 2000 tons—which put into the market prospectively about 7000 tons of good ordinary foreign lead. The immediate effect of this action was to depress prices lower than they have been for several years. The total sales thus far have amounted to 4125 tons. The government business has been conducted in a careful and judicious manner, keeping pace with the market and securing fair prices with. in a careful and judicious manner, keeping pace with the market and securing fair prices without injuring trade. It appears that of the 7000 tons first reported as coming into market the government had used considerable, so that only about 2200 tons more will be disposed of beside 1500 tons of bullets to be remeited into pigs. It would appear at first sight that our supply would have been inadequate to the demand last summer had it not been for government lead, but in reality it was only the fact of

mand last summer had it not been for government lead, but in reality it was only the fact of that lead being here that checked shipments of domestic to this point and discouraged capitalists from turning their attention to this article. Another point worthy of note is the increased receipts of lead from San Francisco, which have, in 1874, been more than double that of previous years. This fact shows such a severe deflection of the lead trade into new chancels that our Eastern refluers may justly regard California with icalous fears as a dangerous competitor.

of the lead trade into new channels that our Eastern refluers may justly regard California with jealous fears as a dangerous competitor.

The refluing and desilverizing branch of the lead business offers some facts of such deep import that they cannot be overlooked. There are, in all, about twenty establishments of this kind in the country, and yet among them we note six commercial failures in 1874, beside the fact that two others have stopped work, and still two more are offered for sale. The percentage, therefore, of refining and desilverizing works that have apparently found it to be a non-paying business is nearly one-half, which leads us to one or all of several conclusions. Ist. That the business is overdone, in which case the ones that remain will make it pay if too many new concerns do not organize. 3d. That the business is one which requires long and thorough training on the part of workmen, as well as superintendent, in all its branches, and that the money lost in it has been expended in purchasing experience which can only be of benefit to those who still continue the work. 3d. That wastage and shrinkage, loss of interest and commissions enter so largely into this business as to deceive and delude novices, and thereby cause them to compete in buying bullion at prices which old stagers know to be runously high and devoid of profits. Whatever the truth in the matter may be, the results show that the business must be conducted with more than usual prudence and knowledge.

The importation of lead into New York has decreased about twenty-five per cent, from last year. This is owing to the facts that government has applied the demand for ordinary lead, and that much of the corroding lead is now shipped direct to the Atlantic scaports. The demand for ordinary foreign at present comes chiefly from cartridge manufacturers who receive the drawback on all lead exported in cartridge form.

The English market during the year has experienced wide flucturations. On the last of

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ceive the drawback on all lead exported in carridge form.

The English market during the year has experienced wide fluctuations. On the 1st of January common English lead was quoted at £24 but fell to a shade below £20, before the 1st of June, thereafter rallying to £24, the closing quotation of the year. The production in English days are the 17,000 tons, or nearly one-quarter, so that peace in Spain or American industry and railroads must be the means of making good the deficiency or lead will range from seven to eight cents per pound rather than from six to seven. In conclusion it may be said that the outlook is brighter than it has been. The effects of the panic have about disappeared; business stands on a firmer basis now than it has any time for three years past, and the country looks hopefully to Congress for honest, wise and speedy legislation in the financial question.

The Puddler's Strike.

The Pittsburgh Commercial, of the 23d inst., says; Pursuant to notice given yesterday, a general assemblage of the boilers of the city union and non-union men, gathered upon Fiftl avenue and for some time blocked the side walks. The meeting had been arranged to b held in the hall, fourth floor of the Dispatch building, but not half of those gathered could obtain enterance. At two o'clock the room was filled to its utmost capacity, nearly al standing, there being but few chairs to occupy ome feared that the joists of the floor would not hold the great weight, while it was eviden to all that there could be no business satisfac torily transacted with such a jam. Boon after two o'clock the chairman of Union No. 1 no having appeared, it was moved that Mr. Wil am Corbett take the stand.

The motion was adopted, and Mr. Corbet tated the difficulty under which they labored He snagested that a larger hall would have t procured for the meeting.

On motion a committee, consisting of Messra orge Dean, Cosworth, Spink, Stewart and he chairm an, was appointed to visit old City Hall and see if that could be had.

The committee at once started on their mis and found Mr. Joseph Caskey, superintendat of markets, in his office. He stated that it as out of his power to allow the use of the hall, as the Duquesne Greys had a lease of it | Failure of Malin Bros., of Philadelphia. om the city. It was with Colonel Campbell allow its use. The office of Colonel Campbell was visited, but he was not in, so that the ailding, and a secret session was then held.

made for a mass meeting at a future time.

While congregated upon the sidewalk the men freely talked about the strike, and it appeared that most of those present were for work soon. Others said that if the manufacturers did not start, orders for iron would go

two mills were running now in this vicinity helped to keep the strikers together, as they held that if those mills could pay \$6 per ton the others could. The speaker thought that some mill owners, owing to the want of orders for railroad supplies, did not want to start, while others, including those supplying hoop iron, could afford to do so, and wanted to do so, but vere deterred by their agreement.

There were some complaints that workingmen not of the boiler class had gathered to was expressed thereat.

Holmes & Lissberger Assets and Liabilities.

Some time after the panic Holmes & Lissber ger, metal dealers, at No. 295 Pearl street, failed. and, as it was understood, with large liabilities. The firm expressed a hope that they would be enabled to keep up, but it now appears that they have been obliged to go into bankruptcy. There is some difference among the members of the firm, Lissberger alone making his petition. Samuel Holmes, the other partner, having refused to join. Proceedings have been taken with a view to learning why Holmes also should not be placed in bankruptey. The petition, as for as Lissberger is concerned, is voluntary, and involuntary with respect to Holmes. The fol lowing is a copy of the schedule : SECURED CREDITORS

SECURED CREDITORS	
J. Bertschman	8857.000
Market National Bank.	12,138
National Park Bank	11,200
Mational Park Dank	11,200
Total	960 990
	1000,000
UNSECURED CREDITORS.	
F. L. Curtis	\$11,970
Joliet Iron Company. Citizens' Bank of Waterbury	12,000
('Itigone' Bank of Waterhury	85, 492
F. W. Hurst	30,805
W Wall	17,180
W. Hall Schoenberger Smelting and Refining Co	15,000
Webster, Lewis & Co	13,750
Crooke Brothers	20,558
Canadian Bank of Commerce	10,773
W. & F. P. Currier	5,454
People's Bank of New York City	11,659
Willimantic Trust Company Tenth National Bank of New York City	11,112
Tenth National Bank of New York City	2,131
State Bank of El zabeth, N. J	5,715
Taylor & Co	8,000
Snow & Son	1,214
John Roach & Son	16,074
Himers & McGowan	1,922
Edward Beck & Co	6,800
N. S. Simpkins, Jr	73,249
Quincy Mining Company	28,820
Cookson & Co	1,800
Kuhn, Loeb & Co	9,648
Kuhn, Loeb & Co Sanders Brothers, London, England	5,000
Sw tzerlaud Insurance Company	1,050
S. Harston & Co Lackawanna Iron and Coal Company	2,500
Lackawanna Iron and Coal Company	1,000
Morton, Bliss & Co	9,858
Bank of New York	1,781
Chas. M. Fry. in gold	8,000
Chas, M. Fry, in gold. New York Guaranty and Indemnity Co	8,990
F. M. Steller	216
J. B. Elliman	750
S. B. Parsons	750
H. F. Hamill	100,000
E. Ketchum & Co	2,835
Drexel, Morgan & Co	5,000
E. M. Barsten & Son	77
Daniel Channey	5,874
An "nnknown" creditor	5,978
An "unknown" creditor. Metropolitan Bank of New York City	30,394
Shoe and Leather Bank	6,590
	5,767
Kuhn, Loeh & Co	5,892
Holmes & Parsons	31,179
Holmes & Parsons	OTITED

Total unsecured creditors Accompanying the petition is a schedule of the personal property of the firm. It consists of certified checks and promissory notes, which mount to \$25,365.95.

The schedule of the firm's choses in action consists of debts due the firm, and, according to the schedule, they amount to \$343,601.73. The alleged debtors are scattered all over the country. Among them are the Salt Lake Railway Company and Farrel F. and M. Company, Ansonia, Conn. The debt of one of these is stated at \$37,666, and that of the other amounts

The following is the individual schedule of

	Lazarus Lissberger:
,	CREDITORS HOLDING SECURITIES.
h	Debt. Security.
3-	Farrel F. and M. Company \$6,600 \$2,600
8	Bank of New York Unknown 89,452
h	\$92,092
d	UNSECURED OREDITORS.
n	Crooke Brothers
	J. W. Draper 93,000
11	William Houeton
7.	H. Lissberger 8,000
d	Total unrecured creditors \$79,245
t	Mr. Lissberger's personal property, accord-
3-	ing to his schedule, amounts to nothing. His
r	
	individual choses in action are as follows;
t	DEBTS DUE ON OPEN ACCOUNT.
l-	Mortimer Hendricks \$5^0
	D. Lissberger
tt	M. Lissberger
1.	
	Total \$33,500
0	STOCKS IN INCORPORATED COMPANIES. AND INTEREST IN JOINT STOCK COMPANIES.
R.	Warwick Mining Company, 800 shares; cost, \$800;
	value unknown.

The failure of Mahn Brothers, iron manu-

showing that their assets exceed their liabiliand there will be no danger of metallic poisonthese induce may predispose to them. Dr. Tynties by about \$207,000. On the strength of this,
ing. Nor will the annoyance of from rusted dall pointed to the mucous membranes of fever itors for \$18,000. Malin Brothers were sole their means in various iron enterprises. They owned large interests in four pig iron foundries, take part in the meeting, and dissatisfaction and the demand for iron having almost ceased, they found a large part of their capital locked up at a critical moment. They a'so accepted largely, and, as it appears, unwisely, for a large number of firms. The immediate cause which precipitated the failure was the sudden demand on them, by two foundry men in Philadelphia, for sums amounting to \$60,000. A bank in Philadelphia which had promised to carry \$35,000 for them, also suddenly called in that amount. Before suspending, they paid \$43,000, and they claim that if the bank had sustained them they could have weathered the storm. The members of the unfortunate firm are young men of of high reputation for integrity and business announced wild rumors of failures among firms of the highest position found credence for a time.

> Samuel Fulton & Co, iron pipe manufacturgranted at the time of their first failure.

Tanks.

down as a sediment upon the bottom of the vessel. Sailors assert that water clears itself by working after the manner of wine or liquors. Though this is not strictly true, yet it is a fact that most of the impurities held mechanically suspended are thrown down and the water in time becomes fit for use.

If we can store water, exclude dust and give there are two evils to be apprehended. Dust will find its way into the water and foul gases accumulate in the cistern. These will be abboth drinking and cooking. This absorbtion than most people are aware, a very large quantity being taken up, and as the water does this with rapidity, we should not allow it to have access to foul air.

We have, in a former number, called attention to the evils of the ordinary underground country cistern, with its cover of boards, and the dirt and foul matter which finds its way into it. This evil is aggravated by the fact that there is no way of cleaning except by pumping the water out. It being very rare to provide any means for letting the water flow out of its own accord, consequently the labor involved in this operation of cleaning is so great that it is only undertaken at great intervals and is rarely as thorough as it should be.

Of the materials for tanks, we have, in the but few gallons of water are to be stored

getting a disagreeable taste.

convenience necessary in the way of water supthe house, and then carrying into different take us over seasons of drought. rooms in pails, it should flow in pipes. This is not difficult; small tanks on the top of the house are as easily filled from the roof as those on the ground. It is very easy, when there is water on the top of the house, to bring it down to the kitchen in pipes. In many places, too, unknown.
Huron Silver Mining Company of Montana, 200 shares; value unknown.

are aware of.

It is understood that arrangements will be to \$500,000. They have issued a statement, feetly protected from dust, from foul vapors stances, however much the condition which

vania, have been doing a business amounting rented separately by a small pipe. Protected elsewhere and they, the boilers, could follow to about \$3,000,000 a year. Their acceptances by paint, and closed so that evaporation cannot take place, a small quantity of water will pro-order, but not now of them, said that if we boiler, but not now of them, said that if we should come to a specie basis a reduction of panies, and are heavily in debt to several firms. Water from the roof should be led to them panies, and are heavily in debt to several firms Water from the roof should be led to them wages must come. He thought the fact that in Schuylkill county. To one man in Philadel-two mills were running now in this vicinity phia the embarrassed firm owe \$40,000. The Mount Carbon Rolling Mill Company are cred- ways provide means for allowing the flow from the roof to run off without entering either cis-Uhler Iron Companies, and these are their chief creditors. The cause of the failure was the insome houses the tanks are placed on a large shallow basin. This is inclined a little, and at perhaps doing damage to plastering and furni-

> The cost of setting up a tank of this ability. The failure created considerable consternation in Philadelphia, and when it was first rily expensive. An ordinary tinman can do sort we have described, is not necessait if a plumber is not to be had. In fact any one who can set a pump and make the connection may set up a barrel in an upper part of the house, bring in the water to it by a pipe ers, of Conshohocken, who failed during the from the caves and carry another pipe down to panic for a large amount, have, within a week, the kitchen. Connections with the wood are failed to meet their payments on an extension not difficult, and if the stove dealer or tinsmith cannot achieve a wiped joint, a very good though not very handsome one may be made with the soldering iron. A flange of sheet lead around the end of the pipe gives means for making a joint with the wood. We would ad-Water, when stored in tanks or other closed vise our country friends to attempt a job of vessels, seems to undergo a sort of fining pro- this kind whenever they can, as if successfully cess, by which many of its impurities are thrown carried out makes a demand for more of the same sort.

> The size of a tank to hold the water falling upon a given roof is a matter that should not be altogether neglected. The average rainfall in the Northern States may be taken at about 48 inches per year. That is, if all the water that falls on a given surface in a year were saved, some time for settling, the water is pretty sure 4 feet. This supply is not very evenly disand none lost, we should have a depth of about to be improved in quality. If the cistern is open tributed through the year. Sometimes we get 2 or 3 inches in a day, or even more, and then there are several weeks without a shower. sorbed by the water, and so render it unfit for all the rainfall on a roof we should be very well Could we make our tank large enough to hold off, but as we cannot always do this we must of gas by water is of much more importance make some calculations as to the amount of water that falls, and what we wish to use per day. The average amount of rain falling in the United States may be taken for at about 36 inches, or say 3 inches per month. For most parts of the country this will be an outside estimate, for in some months there will be no rain and in others it may reach even 6 inches. Now, getting the length and breadth of the roof, we multiply them together and find the surface upon which we are to gather our water. This will be exact if the roof is not of too sharp a pitch. When the roof is sharp the size on the ground plan must be taken. Now, the half the number of square feet on the roof multiplied by 7.4 will give us the greatest amount of water in gallons which we can expect to catch in any one month, while the average will be one-half first place, stone, earthen ware, enameled of this amount. If we have a roof 20 feet by ware; then brick-work and brick laid in mason- 40, from which we mean to take water, we shall ry. Their value is very much in the order have 800 square feet, half of this is 400, which, given, though a perfect tank would seem to call multiplied by 7.4, is 2960.0 gallons as the greatfor an interior surfacecovered with a vitreous est amount of water we are likely to obtain, enamel. This is, however, only possible where and 1480 about the average quantity that we shall have for storage. By a simple calculation Among the woods, the best materials for hold- like this we get at the quantity of water to be ing water are pine, oak, and, possibly, a wood expected. If in this case we find room for say known at the West as cucumber wood. Pine four 63 gallon casks we find that we shall have will often keep water better than a brick cistern storage for 252 gallons, or say one-sixth of the or tank, because some kinds of water dissolve water that falls. The remainder will then be various substances out of the cement and become hard, while pine, and oak, also, contains there was room for but one of the 63 gallon practically no soluble substances, and water can casks, we could then use about 2 gallons per be kept in them with out becoming hard or day the year round, and never run dry save in the most extreme cases. Bearing in mind the Many country houses have the lalge under- fact that there are occasional months of ground cisterns of which we have spoken, and drought, and that our storage must, if possible, are usually supposed to be provided with every be large enough to make up for this, we can easily arrive at some idea of what amount can ply. Yet, instead of having to pump water into be used daily, and what would be needed to

Fever Germs.

The recent deadly outbreak of typhoid fever at Darwen, England, has occasioned an interest warvick similar Company, 300 shares, cost, each, to the kitchen in pipes. In many piaces, too, at Darwen, England, has occasioned an interest-value unknown.

Porcupine Petroleum Company, 150 shares of stock; power is obtainable, and the small tanks are assily kept filled, but the great difficulty usual-ly mentioned is the tank itself. If of wood, what will become of it when partly empty, and have been, in a more or less popular form, inif lined with zinc or lead, the danger of poison- troduced to public notice. The question was ing is feared. The matter of shrinkage is more broached by Dr. Tyndall, who, with his usual easily disposed of, we think, than most persons vivacity, declared his acceptance of the conclusions of an emineut observer to the effect that In the first place we think that thoroughly the organisms which are assumed to be the imwashed molasses hogsheads, wine, or alcohol mediate cause of fevers are, in the first instance, facturers, of Philadelphia, which occurred last barrels, and the like, are the very best water developed from the fluids of the body subject was visited, but he was not in, so that the racturers, of rhinadelphia, which occurred that the was not in, so that the racturers, of rhinadelphia, which occurred that the was not in, so that the racturers, of rhinadelphia, which occurred that the was not in, so that the racturers, of rhinadelphia, which occurred that the was not in, so that the hands of the body subject tanks, because they can be made tight and kept to the disease, and that, therefore, the origin of supported to the meeting in the Dispatch supported to the meeting in the Dispatch was not in, so that the limits of the body subject tanks, because they can be made tight and kept to the disease, and that, therefore, the origin of supported to the meeting in the Dispatch was not in, so that the limits of the body subject tanks, because they can be made tight and kept to the disease, and that, therefore, the origin of supported to the meeting in the Dispatch was not in the body subject tanks, because they can be made tight and kept to the disease, and that, therefore, the origin of subject to the disease is independent of surrounding that city. The liabilities of the firm amount they will hardly shrink; the water will be per- miasmata or emanations from putrefying sub- gentine government.

they ask for an extension of time from their clothes be encountered. Where from tanks victims as full of altered blood corpuscies, creditors of 9, 12, 15, 18, and 24 months They have been used this latter evil has often been which subdivide into small fungus-like bodies, holding out. Some said they were able to hold out six months, and claimed that the manufacturers would be glad to have them go to facturers would be glad to have them go to firm, which is among the largest in Pennsyl- by pipes at the bottom. Each one should be their peculiar "micrococci"—would thus seem analogous to the fermentation produced by the yeast plant, the original germs or seeds being, on the theory adopted by Professor Tyndall, evolved from the living blood corpuscles by a process of development. Dr. Lionel S. Beale, whose authority in matters of this kind in much higher than that of Dr. Tyndall, insists on the great practical importance of this question, independent of its great scientific interest That the poison of fever grows and multiplies agents for the Schuylkill Iron Company, the Dauphin and Monocacy furnaces, and the Moslem, Ringgold, North Pennsylvania and dirt accumulates in the gutters, and until this is still a matter of dispute among original investigators whether it is a microscopic fungus originating without, or a living particle arising vestment by the firm of an undue proportion of their means in various iron enterprises. They the dirt may be drawn off and clearer water Beale holds in common with Dr. Tyndall, but left above. Where a bottom waste pipe can be he also insists "that we human beings are alone provided for large cisterns, much dirt car be responsible for "the production of these germs, got nd of by stirring the bottom a little, and "and for their maintenance and spread; that, then opening the waste way much dirt flows therefore, a State of civilized society is conout, while a large part of the water is saved. In ceivable in which fever germs would neither multiply nor arise, and, in the event of their sheet of zinc, which has its edges turned up an being introduced ab extra, would themselves inch or an inch and a half, so as to form a certainly perish, instead of damaging or destroying the higher life." "Fever germs," he one corner is connected by a small pipe with continues, "will not be developed direct from the waste pipe. Any leakage thus finds its way fifth, but by permitting people to live year after off without going down through the house, and year in open defiance of well-known sanitary laws, the generation of fever poison in their bodies is favored, while its free growth and multiplication if imported is reduced to a certainty. It is therefore our aim to prevent people from falling into that condition of health which favors the organization and propagation of contagious fever poisons in their bolies." Further, although "we may successfully and without fear contend with fever germs if we only preserve our healthy powers of resistance, hundreds of human organisms are, through defective sanitary arrangements, being prepared for invasion. Bad air and sewage, the adjacent dungheap," concludes Dr. Beele, "may be all perfectly free from fever germs, but nevertheless will certainly bring about changes which will render many of those exposed to their influence the ready victims of disease. While, therefore, it is desirable, by the use of disinfectants and by other means, to destroy existing fever germs with all possible speed, it is certainly of far higher importance, as regards the welfare of the people, that we should do our utmost to press upon authorities the necessity of providing pure water and efficient drainage wherever men congregate. Good water and well-arranged sewers render impossible such a calamity as that which we have now to deplore at Over Darwen. Even though the inhabitants of a town well drained and supplied with good water should be fully exposed to the assaults of hosts of fever germa in their highest state of morbid activity, they would suffer no injury."

> The Lewistown True Democrat says: The Standard Crucible Steel Company, at Logan, in this county, two weeks ago, completed the forging and boring of the great Hitchcock gun, about which so much has been said within a year. It was made in pieces or rings, which were shipped to Massachusetts, where the rings will be welded together, making a complete and immense cannon, the total weight of which will not be less than 42,000 pounds. The bore is nine inches in diameter. One of the pieces thus made and shipped weighed 4590 pourds. The work of manufacturing 100 passenger car axles is likely to go on. The tests made have proven satisfactory, in showing that axles of sufficient strength can be manufactured, although the figures we gave in a recent issue were not entirely accurate. Another test was tried about ten days ago. A solid weight of 1715 pounds was dropped upon an axle from an altitude beginning at 25 feet, and on the fourteenth blow, from an altitude 32% feet, the axle broke. This, however, demonstrated an amount of resistance considerably in excess of what was

> The Burlington Hawkeye says: Among the other pleasant occasions which marked the holidays, the friends of a B. & M. baggage man presented him with a patent trunk lifter. It is made of steel and brass. Two clamps catch the trunk at either end, and a turn of a knob in the hand of the baggage man pulls both straps out by the roots, while, at the same time, an iron ball, weighing nine pounds, hammers away at the bottom of the trunk, and a neat, threejointed, self-acting rake, with twelve teeth, reaches in as quick as a hole is made and sweeps from end to end of the trunk, finally emerging through the lid, where it clinches, and, by a sudden backward jerk, turns the trunk inside out. No baggage man should be without it.

> The New Brighton News says: The steel works in Beaver Falls is a fixed fact. A deed has been executed to three Pittsburghers and one Cincinnatian for the land lying between the cutlery and gas works. The proprietors will be down shortly for the purpose of bringing plans and specifications of the proposed buildings. They have ample capital with which to do business, and propose to erect the works at once. They will manufacture all kinds of springs, saw plates, &c., and will do a heavy business. This is thought to be one of the best factories yet brought to this valley.

> A turret ship of 1800 tons, 185 feet long, 44 feet beam, and drawing 6 feet 6 inches of water, has been constructed in Liverpool for the Ar-

HOBART'S TACKS.

DUNBAR, HOBART & WHIDDEN,

Office and Salesroom, 116 Chambers Street, New York

Factory, South Abington, Mass.



American, Swedes and Copper Tacks,

Tinned, Leathered and Large Head Carpet Tacks, Finishing Nails, Black and Tinned Trunk Nails, Miners', Gimp, Lace and Brush Tacks, Hungarian, Chair, Cigar Box and Barrel Nails, Glaziers' Points,

IRON, STEEL, COPPER, ZINC AND BRASS SHOE NAILS,

Heel and Toe Plates, Steel Shanks, and Fancy Head Nails, Silver or Japanned Lining and Saddle Nails.

on hand at salesrooms, for immediate delivery if required. Odd and irregular sizes made to order or cut from sample at short

Western Coal.

A correspondent of the Chicago Journal, in a short time. Experiments made with iron an annealing oven. in the new hydro-carbon gas works in this city and the soot, and thus economize fuel and stoves. Nearly every second-hand store, aucof wrecks of the attempt to succeed. It is get-ting rather expensive. The best device I have land. The draft, smoke and gas rotate until they are consumed before coming in contact with those parts exposed to intense heat. 1 stopping teeth.

speak for the benefit and economy of thousands

Test for Silver in Plated Wares—"There are speak for the benefit and economy of thousands of readers of the Journal who are largely intersay this invention is here giving perfect satisfaction for the parlor or office, a fact which the victim of hundreds of unsuccessful experiments will be glad to know.

Workshop Recipes.

one part, with seven parts of alcohol, and | Iv a blood-red colored mark (chromate of silon Varnish.-Digest sheliac varnish in

alcohol equal to seven or eight parts. A Simple, Good Cement.-Shellac dissolved in alcohol, or in a solution of borax, makes a use-

ful cement. Hydraulic Cement .- Powdered clay three lbs., oxide of iron one lb., and boiled oil enough to

make a stiff paste. Red-lead Cement for Face Joints .- 1 of white

the proper consistency. Rust Joint (Slow Setting) .- 2 sal ammoniac : 1 flour of sulphur; 200 iron borings. This ce- and the addition of water produces a yellow ment is of the best for joints not required to be

Black Leather Varnish .- Digest 12 parts of shellae; white turpentine, five parts; gum sandarach, two parts; lampblack, one part; with spirits of turpentine, four parts, and alcohol,

To Braze Sheet Iron .- Mix a solution of borax and water for the flux, and mix brass spelter, Railroad brought to this city nearly which lay thickly on the iron and melt gently over a clear smith's forge; remove the work from the fire directly the spelter is run into the joint, and leave it to cool.

Cement for Iron.-Glycerine and litharge, stirred to a paste, hardens repidly, and makes idleness is impracticable in the vineyard, so a tolerable cement for iron upon iron, for two stone surfaces, and especially for fastening iron given it for an inheritance, but with it he gives in stone. This cement is insoluble, and is not acted upon by strong acids. You can cement cloth to polished iron shafts, by first giving out and bring it forth into the broad smilight

acetic acid.

Tortoise Shell Japan .- Take good linseed oil, writing from Des Moines, offers the following one gallon; amber, one-half pound; boil tosuggestions respecting the proper methods of gether until the fluid is brown and thick. Then suggestions respecting the proper metalous of burning Western coals: This is a question which interests thousands in Illinois and Iowa.

strain through a cloth and boil again until of consistency of pitch, when it is fit for use. Hav-The coal field is immense, and timber scarce, but the coal is full of gross objections to contobe to be japanned, and then brush the parts over sumption for domestic purposes. It is so charged with cerbon, soot and sulphur as to with drying oil diluted with turpentine. When banish it from the house for cooking and heat- this coat is dry, brush the whole with the aming purposes. The inventive genius of the country has been turned seriously to this matter, but so far with little success. The stoves article into a hot stove to undergo heat for as "puff" and smoke, the gas will escape, and long a time as required to produce the desired the sulphur will destroy the iron, so that the effect. In some instances as much as two stove is full of hideous cracks, and worthless weeks may be required, after which finish in

Metallic Cement .- An alloy of copper, pr the past year, have demonstrated more remark.

pared as follows, is capable of attaching itself firmly to the surfaces of metal, glass and porcefron pot, 21/4 inches thick, made from sheet iron lain. From 20 to 30 parts of finely divided subjected to a white heat from this coal for copper (obtained by the reduction of oxide of four days, when cold can be crumbled to pieces copper with hydrogen, or by percipitation from with the fingers. The effect was the same on solution of its sulphate with zinc) are made the best quality of wrought iron. Stove makers into a paste with oil of vitriol. Seventy parts have sought to consume this sulphurous gas of mercury are then added, the whole being well triturated. When the amalgamation is complete the acid is removed by washing with tion and back shed in Iowa and Illinois is full boiling water, and the compound is allowed to cool. In 10 or 12 hours it becomes sufficiently hard to receive a brilliant polish, and to scratch seen is one made by a stove company of Cleve. the surface of tin or gold. By heat it assumes the consistency of wax, and, as it does not contruct on cooling, it is also useful to dentists for

tricks in all trades," saith the proverb. If this ested in this stove and fuel question, when I is true, silver platers will, perhaps, bear watch-say this invention is here giving perfect satis-ing as well as other tradesmen. But the following is a simple test for the detection of any fraud in the quality of the metal employed for plating. A cold saturated solution of bichromate of potassia in nitric acid (sp. gr. 1.2) is applied to the metallic surface (which must be perfectly clean) by means of a glass rod, and mmediately washed off with some cold water. Varnish for Instruments.-Digest seed lac, If pure silver is present there will appear clearver). Upon German silver the test liquid appears brown, but after washing with water the blood-red colored mark does not appear; the so-called Britannia metal is colored black; on platinum no action is visi1 le; metallic surfaces coated with amalgam of mercury yield a reddish speck, which, however, is entirely washed off by water; on lead and bismuth the test liquid forms a yellow colored precipitate: zine and tin are both strongly affected by this lead; 1 of red lead, mixed with linseed oil to test liquid, which, as regards the former metal, is entirely removed by water, while, as regards the latter, the test liquid is colored brownish, precipitate, which slightly adheres to the tin.

An able address on the general interests of Ohio was made recently by T. Ewing Miller before the Columbus Board of Trade. Among other things he said: There were mined in this State last year about 110,000,000 bushels of coal, and the Hocking Valley 22,000,000 bushels. In close proximity to the coal fields are to be found iron ore, limestone, and fire clay in almost in xhaustible quantities. But what avail are these great treasures unless we bring them into use? also is it in the coal field. To us God has the brain power to work out plans for its development, and the strong muscle to hew it them a coat of best white lead paint; this be- of civilization. I believe that these huge rough ing dried hard, coat with best Russian glue, blocks are the embodiment of our future

dissolved in water containing a little vinegar or | Each one is the representative of the name and Each one is the representive of the name and fame we are to carn from them. It has been said that the wealth and power of Great Britain has been derived more from coal than from any other natural source. England has crown and coronets on her coat of arms; for our part we wish nothing grander to display in return than a bit of this all-powerful, wonder working mineral.

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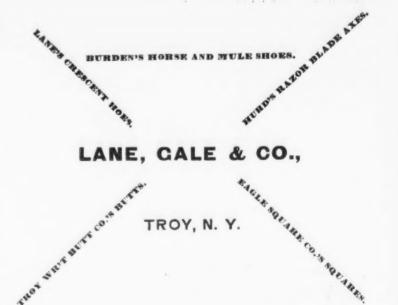
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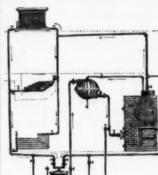
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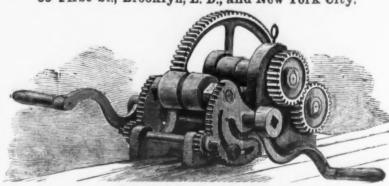


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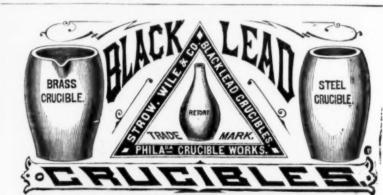
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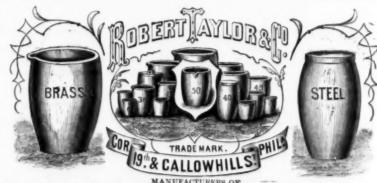
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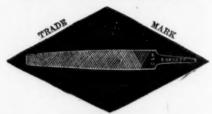


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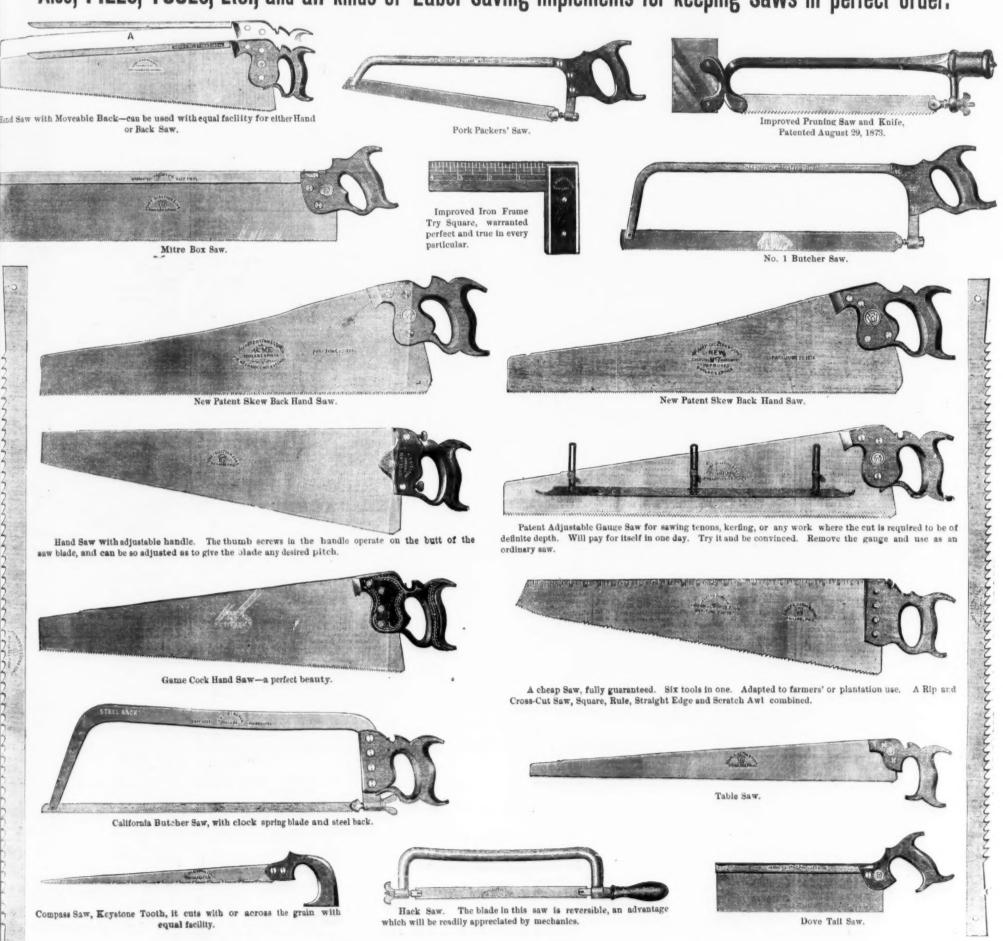
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Griswold 2d quality dis 40&5 %	0000
Sueil Mrg. Co	Y
Andrews' Bits dis 25 % Cook's Bits dis 5.0 % Augers 418 6 826—dis 15 %	PV S
Tyes \$20 @ \$30 — dis 20&10 % 10	
** French, Swift & Codis 25&10 % Bonney's Adjustable. ** doz \$48—dis 25 % Stearns' ** doz \$48—dis 25 % Stearns' ** each \$4:30—dis 40 %	3
" Cushman's Expansive. dis 20% Gimlet Bits—Screw, \$7°10; no screw, \$9. dis 40% Double Cut Gimlet Bits, Shepardson's. dis 20%	THES
" Douglass" dis 2.0\$10 % " Ivez" dis 2.5 \$ " Ladd's dis 5.0\$10 % dis 20 \$	2
Griswold's Fatent Morse's Bit Stock Dellis. dis 20 % L'Hommedien's Ship Augers. dis 10 % Watrous Ship Augers. dis 15 %	8
Vaughan's Post Hole— 6 in, \$23 60; 9 in, \$25 per doz	1
Lewis Single Twist Bits	,
Stanley's Excelsior	h
H. Clark's (J. C. W. & Co.) Brohzed # doz 11 50 @ 12 50 Hurd's # doz 11 00 @ 11 50 @ 13 50 Morris # doz 12 50 @ 13 50 Morris # doz 12 50 @ 13 50	92
Red Jacket	BLI
Crown	BUSET
	FOR
Beils. dis 60&5&10 % Hand, Light Brass. dis 40x10 % Extra Heavy. dis 50&10 %	E
Boller Hand Light Brass dis 60c6.6c.10 x Hand Light Brass dis 60c1.6c.10 x Extra Heavy dis 60c1.6c. White Metal dis 50c1.6c. Silver Chime dis 15c1.6c. Swiss dis 15c2.6c. Globe dis 15c2.6c. Gloss Abb's dis 10c2.6c. Gloss Globe dis 10c2.6c. Gloss Globe dis 10c2.6c. Gloss Gloss Gloss dis 10c2.6c. Gloss Gloss	000
Gong Abbe's dis 10stro Yankee dis 306:10 % Barton's dis 33% % Orank, Taylor's dis 25 % dis 50 % dis 50 %	E
Frook's dis 10 %	3
Taylors. Hart, Biven & Mead Mfg. Co. dis 50&10 \$ Pull, dis 50&10 \$ Pull, Brook's. dis 50 \$ 10 12 55	I
Western dis 20&10 %	111
Gong Abbe's. dis 10x10 y dis 10x10 y dis 10x10 y dis 10x10 y dis 20x10 y dis 2	A
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Call dis 15 % Bellows. dis 20 % dis 20 % dis 20 % dis 15 % dis 16	1
Van sand's, No. 4000, \$14'00; No. 5705, \$10'75net Washbura's Patent	67.41
Block. Block. Tackie, Rope and Iron Strapped, Providence	1
# Hocks - Tackie Rope and Iron Strapped, Providence Tool Co. a list dis 10 % Burr's dis 10 % Stanley Rule and Leves Co. dis 25ct 10 % Hestis.	1
Cast Iron Garrel, Shutter, &C	1
Wrought Iron Flush, Stanley's dis 10&10 % Sargeat's dis 50&10 & 0 Oarriage and Tire, Common dis 56&10 \$	1
Star, Philadelphia. dis 50 @ 50&10 % Eagle Philadelphia. dis 50 @ 50&10 % Qurringe and Tire, K. B. & W. old list dis 51 %	1
Piow, is B & W dis 20 % Btove, K B & W dis 20 % Shelten Co, Shaved Heads dis 20 % Union Nut Co., old list dis 60 %	1
Borax	1
Rellogge	
Burra	1
Rumanon, rectary & dis 50&10&10	1
Wilson Mfg. Co. dis 10 % Sponford's Patent dis 50 k10 % Noble's Patent dis 40 k5 % Bartholomew's American Ball dis 15 k10 %	
Patent Grip. dis 40&5 %	
Brackets.—Shelf	
Bung Hote Borers. dis 25 g. Ruchors' Cleavers. dis 10&10 @ 25 g. Burchors' Cleavers.	
Bunason & Beckley Mig. Co dis 20x 10 x 10 x 25 x 10 x 20	
\$19-93 \$21:53 \$22:00 \$27:00 \$30:00 \$33:30 \$36:30 \$40:00 \$1	
Butte.	
\$40	
Drilled Wire Jointed Fast Joint, Narrow, High List	
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Wrought Set of the	
Paimer Blind Butts dis-808:10 s Nicholson Blind Butts dis-808:10 s Parser's Blind Butts dis-508:10 s Chark's Surface Blind Hinges, Nos. 1, S and 5 . dis-508:10 s No. 40 and 50 . dis-508:25 s	St. 65 cm. cm.
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The American Spiral Spring Butt Co	200
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ew York Who	
Carpet Sweepers. each \$2.75 U don. each \$2.75 Welcome. each 2.75	net
Curridges. dis Soki Metallic. dis Soki Metallic. dis Soki Carus,—Horse and Curry dis Soki Cetton dis 10c. dis 1	0%
Word	57
Sed. dis 30&1 Sed. dis 30&1 Plate and Shallow Socket dis 40&1 Deep Socket. dis 30 Cattle Leaders. new list dis 60&1 Chate	0%
Chate Engush Coll	We .
Trace, 6½-10-2 3-16 ½ 5-16 % 1-19 pt the cask, ≥ pair, gold. Trace, 7-10-2 by the cask, ≥ pair gold.	57c
Chate Engists Coll	18c
Chalk. Brass. dis	net
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Morway or Best dis 5 Superior Philadelphis dis 45 S. Coat Shovels.	0 %
Coal Shoveis 9 doz, \$ 55 @ 1	20 00 5 %
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Sidney Shepard & Co.'s new list	net :
Brass Racking Us a Lock and Globe dis 2 Lever Bibbs dis 2	5%
Coffee Mills. dis 1 Board and Box. dis 1 Increase Wilson's. dis 2 \$3.50, \$10.50 - dis 2	5%
Oct Color	5%
Bernia & Call Co. 8. dis 50.841 COOK'8. dis 1 Excessior. dis 5 Excessior. dis 5 Coopers' Tools. dis 5 Excessior. dis 5 Coopers' Tools. dis 15 @ 2	5%
Feets Stow & WICOX dis 15 @ 2 Coopers' Tools dis 15 @ 2 Bradley's dis 20 @ 2 Chas. E. Little dis 15 @ 2 Swan & Brombacher dis 15 @ 2	
Swan & Brombacher. dis 15 @ 2 Corkscrews. dis 2 Corn Knives and Cutters. Bradley's. dis 1	
Bradley's	net 60
Crucibles. Gautler & Co	%e
%, %, % in., \$1.80, \$2.00, \$2.40. dis 1 Curing Tongs. \$\vec{v}\$ doz \$6.50-dis 1 Pinching Irons. \$\vec{v}\$ doz 7.50-dis 2	5 1
Hotchkias' and Kellogg's, fron and Brassdis 20&1 Fitch's (List of No. 24), \$1.00)	U% U% U%
Lawrence Curry Comb Conew list, Jan., 18 5, dis 2 Curtain Plus.—Silvered Glassoid list dis 52 Cutlery.	15 % 16 %
Crow Barss Cast Steel points Crucibles Gautler & Co	5%
Britannis	10 % 10 %
Bog Collars dis 2 Embossed Gilt dis 2 Leuther dis 2 Leuther dis 3	10 % 20 %
Door Springs. \$7.50 ♥ doz−dis 50& Gray's. \$7.50 ♥ doz−dis 50& Torrey's Patent. \$7.50 ♥ doz−dis 50&	10 %
Palmer's Japanned No. 6	30 Z
Challenge.— Japanned	10 %
No. 3 small	4.4
Crossman's No. 1.	0%
Bradley's	5 %
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" Hotchkiss' dis Ratchet, Merrili's dis	10 %
Adjustable Handle	20%
Beach Patent (Morse)dis Kgg Beaters. Monroe's	15 %
Beach Patent (Morse)	6°00 20 %
Feerless	10 %
Flour. Flour. Flour. Flour. Kettles dis	5 5 C
Recutcheons. Boot Lock. Door Lock. Brass Thread. Wood. Gis 606 Wood. Characteristics of the control of t	eks 10 % 25 %
Faucets. Fenn's dis	50 %
Faucets Fenn's dis	10 %
Wood, Cork Lineddis 63& Felloe Pintes& lb 14c; dis Files.	10 %
American File Co \$5 00 to 2 currency—dis Nicholson ————————————————————————————————————	net 10 %
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Fellor Plates	old old
Moss & Ganble	old old
R. Ibbotaou	7:00
Knox, with 4-inch Rolls	net net
O. K	net net
Excelsior, No. 1	net net net
Limet & Co. (French)	net net net
K. F. M., 4%-inch Roll 5 50 each dis	net 15 %
Myers Fashion Fluter, 4% inch Rolls 8 00 each dis	net

Geneva Hand Fluter. \$15.00 per doz ne Champion, 6 inon rolis. \$6 00 each dis 10 4 inch rolls. \$5 00 each dis 10 Fluting Scissors. dis 25&10	%
Forges Empire" (W. P. Kellogg & Co.)dis 20	10
Forks. dis 30 Pinted A I dis 40, 10@5	24 24
Fry Pans. Burnished. P. S. & W	00
Gas Stoves. Tiff: & Howarddis 20	%
Gauges. dis 45&10	88 M 88
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	were were
Humason & Beckley Mfg. Co. dls 16%&10 Maydole's, new list. dis 5 Cheng's new list ne	%馬性第
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-	Knivesdis 25 %	M
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-	Lemon Squeezers. Porcelalu Lined	Н.
-	Cotton Chalk	Si
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1	Nuts and Washers. large, 6c; small, 8c off list.	Sh
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K	Rope. Manuracturers' List of Jan. 7, 185, Manila 181, Inch and larger & List of Jan. 7, 185, Manila Lath Yarn and Tar'd Rope. 181, Manila Lath Yarn and Lath Yarn an
et et	"Hay Rope % inch and target & 5 1546
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	Sad Irons. Ivorydis 50&105
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14.34	Sand Paper. Beader & Adamson's (First) 00 to 156, \$4 25 & ream
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REMEMBER	Sash Cord. Common
29.34	Common. Silver Lake, Russia Flax. White Cotton. Drab Cotton. Snep Locks. The Cotton. The C
* *	Drab Cotton. 16 60c. 26 16 16 60c. 26 16 60c.
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A W. W.	Pausage Stutters or Filters. Miles. doz \$23-dis ig Miles. 25 doz \$25-dis ig Stow or Perry. \$4 doz No. 1, \$15, No. 0, \$21-dis ig Draw Cut No. 4. e. e. 26 dis ig dis doz \$25 dis ig Stow Bods. per g. cos \$18 0-dis ig Stow Bods. \$10 list, dis identification.
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e.	American list of Jan. 1, 1874. Flat Head Irondis 52 %
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CONTRACT ARRESTED ON WOOD RESERVE SERVER SERVER SERVER SERVER SERVER ARREST ARE SERVER OF THE SERVER	First Head Brass. dis Sty. Reund Head Brass. dis Sty. Hand Rail. Silver Capped dis St. Ded. dis St. Ded. dis St. Ded. dis St. Bed. dis St. Japanned (List of Flas Head Iron). dis St. Bed. dis St. Bed. dis St. Hand Rail. Silver Capped dis St. Brass. dis St. Birmingham Screw Co. CA. Flast dis St. Head Iron. dis St. Head Rover. dis St. Head Iron. dis St.
COUNTERS ANAMERICA OU UNION REFER SUSSECUESUSCES SUBSECUES ARE BREEKEN UNIONS OF SERVER OF	Fint Head Brass. dis Signature Head Iron. dis Signature Head Iron
CONTRES STATES ON UNIVERSAL ON THE SERVER SERVERS SERV	First Head Brass
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COMMENS MENSESSES OF PERSON MAN	First Head Brass
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COUNTERS SERVESSES OF WORK SERVES SERVESSESSES SERVESSESSES SERVESSES SERVES SERVESSES SERVESSES SERVESSES SERVESSES SERVESSES	Fint Head Brass. disky. Reund Head Brass. disky. Round Head Brass. disky. Brass. disky. Brass. disky. Round Head Iron. List Jan. 1. 1875. disky. Brass. disky. Round Head, Iron. List Jan. 12, 1875. disky. Brass. disky. Round Head, Iron. List Jan. 12, 1875. disky. Brass. disky. Round Head, Iron. List Jan. 12, 1875. disky. Round Head, Iron. List Jan. 12, 1875. disky. Birmingham Erew Co. (A. Field & Co.), Fiat. Head Iron. disky. Head Iron. disky. Birmingham Erew Co. (A. Field & Co.), Fiat. Head Iron. disky. Hickory disky. Birmingham Brass. disky. Round Head. Head. Hickory disky. Birmingham Brass. disky. Round Head. disky. Round Head. disky. Birmingham Brass. disky. Round Head. disky. Round He
COUNTERS SERVESSES OF WORK SERVES SERVESSESSES SERVESSESSES SERVESSES SERVES SERVESSES SERVESSES SERVESSES SERVESSES SERVESSES	Fint Head Brass. disky. Reund Head Brass. disky. Round Head Brass. disky. Brass. disky. Brass. disky. Round Head Iron. List Jan. 1. 1875. disky. Brass. disky. Round Head, Iron. List Jan. 12, 1875. disky. Brass. disky. Round Head, Iron. List Jan. 12, 1875. disky. Brass. disky. Round Head, Iron. List Jan. 12, 1875. disky. Round Head, Iron. List Jan. 12, 1875. disky. Birmingham Erew Co. (A. Field & Co.), Fiat. Head Iron. disky. Head Iron. disky. Birmingham Erew Co. (A. Field & Co.), Fiat. Head Iron. disky. Hickory disky. Birmingham Brass. disky. Round Head. Head. Hickory disky. Birmingham Brass. disky. Round Head. disky. Round Head. disky. Birmingham Brass. disky. Round Head. disky. Round He
COUNTERS CONSTRUCT ON UNION SERVICE CONTRACTOR CONTRACT	First Head Brass

Tapes, Mensuring. American Flash and Cap Co	
Eddy w	Planished Pepper Planished Flour Planished Round
American Tea Tray Codis 15 %	Each\$1:00
Tin Case	Planished Oval C Pints. 2 Each. \$175 Planished Oval C Inch. \$5 Planished Oval C
Tools	Each
The Find of the content of the con	Each
Traps	Planished Imperi Inch 10 1 Each\$1'55 1
Patent Chocker (Union Nut Co.)	Planished Ethas. Pints. Each Planished Liquor
Cage. ** doz 2 50, dis 10 % Trowels. Lothrop's Brick and Plastering. dis 10 %	Mag
Trowels Lotrop's Brick and Plastering dis 10 %	Each
Worrall's Brick and Plastering	Nos 0 1 Each \$4.90 5.4 Planished Round
Sickel and Giltper dozen \$16.03 @ 18.00	Nos
Trenton Vises, Solid Box. \$0 to 160 lbs	Planished Oyster Oyster Dish Cov
Worrall's Brick and Plastering	Tea Pot Handles Stow a
Wilson's Parallel dis 30 % Sargent's ols 50&10&10 Sackus & Union, Parallel dis 25 %	Tea Pot Handles Stows i No. 1, Small No. 2, Medium, No. 8, Large, No. 4, Ex. Larg ers &c
Fisher & Norris' Double Screw Patallel. dis 15&10 ° Trenton Parallel dis 15 ° Merril's Parallel dis 15 °	No. 10, Small,
Parker's. dis 20 s Stephens' Parallel. dis 15 6e 20 s Bonney's Saw Filers per doz \$20—dis 25 s	No. 10, Small, No. 15, Medium No. 20, Large, Stow's Patent E
Wheel Barrows. Canal (Pugsley & Chapman)	No. 12, Bronzed aucepan Handi P. S. & W
Wheel Heads. Brass Bushedper doz \$3 50 net Well Wheels. Revised listdis 60&10 %	No. 1, 5½ Inche No. 2, 6
Wire. Briss and Copper dis 40 @ 45 % Bright and Annealed. Nos. 0 @ 18 dis 40 @ 45 %	No. 1, 5½ Inche No. 2, 6 No. 3, 6½ No. 4, 7½ No. 5, 8 No. 6, 9
" 19 @ 26 dis 50 @ 50 CODETED. " 0 @ 18 dis 55 @ 40 E GOLVENTED. " 0 @ 18 dis 55 @ 40 E GOLVENTED. " 0 @ 18 dis 55 @ 40 E GOLVENTED. " 0 @ 18 dis 55 @ 40 E	No. 1, 5½ inche No. 2, 6
Gaivanized, Nos. 7 to 18	No. 1, 5 ½ inche No. 2, 6 No. 3, 6 ½ No. 4, 7 ¼ No. 5, 8 No. 6, 9
Galvanized Telegraph, Nos. 8 and 9	Japanned Finned Iron Kettle Ears Half gross pair
Well Wacelss. Revised list	Nos Per gross pairs
Judd's Picture Wire dis 50 Wrenches. American Adjustable dis 45 %	Nos Per gross pairs
Judd's Picture Wire	Nos
# Fattern (Wrought) dis 50&10 g " (Malleable) dis 60&10 g Lindsay's Patent dis 25 g	Per gross pairs Malleable Iron P., S. é. W
Tatt's Pattern 01970; Davis 'atent Duniex new list dis 25 % Bemis & Call's Patent Combination dis 20&5 % Merrick's Pattern dis 20&5 %	Malleable Jron I P., S. & W. W. No. 10 Small No. 30 Medium No. 30 Large No. 40 Extra L In cases of 100 Milk Car or Boi Plain, Sc.; Jap able Cilips or Tollet Ware Hus
pemis & Call's Patent Combination	In cases of 100 Milk Can or Boi Plain, Sc.; Jap
Wringers	able Clips or Toilet Ware Han Plain with drill Plain with Cast Plumbers' Scrap
Sherman adoz 64 W. Eureka (Friction) adoz 60 00	Plumbers' Scrap
TIN WARE AND TRIMMINGS.	1
STAMPED TIN WARE, die 5 %. COMMON STAMPED WABE, AC. Bucket Covers.	HOON,-DUTY
	none of the ah
Quarts 4 Inch 4 5 3-16 6 5-16 6 5-16 6 7 11-16 Per gross \$2-00 2 6 3-40 4 25 5-75 10 12	Hoop and Scro none of the ab than 35 per cer cents per lb.: \$6 per ton. Al
100 100	\$6 per ton. Al Railroad, 70 c
10 24 24 25 25 25 25 25 25	none of the ab than 35 per ceres per lb.: \$6 per ton. Al Ralirond, 70 ccents per lb. Pig lron—Ant Foundry No. 1 Foundry No. 2 Gray Forge White and Mo
10 24 24 25 25 25 25 25 25	seper ton. Al Railroad, 70 c cents per lb. Pig Fron—AM Foundry No. 1 Foundry No. 2 Gray Forge White and Mo Coutness Glengarnock. Eginton.
100 100	Seper ton. Al Railroad, 70 c cents per lb. Pis Fron—AM Foundry No. 1 Foundry No. 2 Gray Forge. White and Mo Coutness Glengarnock. Eginton Har Iron. Am. Renned, a
10	cents per ton. Al Railroad, To. Per Irea — Am Per Irea — Am Foundry No. 1 Gray Forge. White and Mo Cotness
100 100	cents per 10. Al Railroad, 70 c cents per 10. Al Railroad, 70 c cents per ib. Pisr iros Al Railroad, 70 c cents per ib. Pisr iros Al Railroad, 70 c cents per ib. Pisr iros Al Rails. Welsh. gold American, at welsh. gold American per gold But the per
100 100	cents per 10. Al Railroad, 70 c cents per 10. Al Railroad, 70 c cents per lb. Pigr Iron—Ani Foundry No. 2 Gray Forge White and Mo Cottness Glengarnock Egilnton Har Iron Aun. Etenned, a Rails Weish, gold American, at woold Rails Common Iron. X to 2 in. roun X to 2 in. roun
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10	cents per ton. Al Railroad, resident per ton. Al Rails.
10	cents per ton. Al Railroad, respectively and respectively. The respectively and respectively and respectively and respectively and respectively and respectively. The respectively are respectively and respectively and respectively and respectively.
100	cents per 10. \$6 per ton. Al Railroad, or Pir Iron-Dail Railroad, or Pir Iron-Dail Railroad, or Geray Forge. White and Mo Coutness. Glengarnock. Eginton. Har Iron. Rails. Common Iron. **to 2 in. roun I to 6 in. x % to Reined Iron. **to 2 in. roun I to 6 in. x % to Reined Iron. **to 10 in. x % to Reined Iron. **to 2 in. roun I to 6 in. x % to Reined Iron. **to 2 in. roun I to 6 in. x % to Reined Iron. **to 2 in. roun I to 6 in. x % to Reined Iron. **to 2 in. roun I to 6 in. x % to Reined Iron. **to 2 in. roun I to 6 in. x % to Reined Iron. **to 2 in. x % to Reined Iron. **To 3 in. x % to Reined Iron. **To 3 in. x % to Reined Iron. **To 3 in. x % to Reined Iron. **To 4 in. x % to Reined Iron. **To 3 in. x % to Reined Iron. **To 4 in. x % to Reined Iron. **To 5 in. x % to Reined Iron. **To 6 in. x % to Reined Iron. **To 7 in. x % t
10	cents per too. Al Railroad, 70 cents per lb. For cents per lb. Gengarnock. Gengarnock. Eginton. Bar Iros. Am. Kenned, a Rails. Weish, gold. American, at w. Common Iron. A to 2 in. roun lb. K to 2 in. y. K to 2 in.
Content Cont	cents per 10. ### Annual Control of the Control of
10	cents per 10. ### Seper ton. Al Railroad, 70 cents per lb. ### Control per lb. ### Country No. 1 ### Gray Forge. White and Mo Countess
10	cents per 10. ### Seper ton. Al Railroad, 70 cents per lb. ### Control per lb. ### Country No. 1 ### Gray Forge. White and Mo Countess
Per gross \$20 \$40 \$3 \$10	cents per 10. ### Seper ton. Al Railroad, 70 cents per lb. ### Control per lb. ### Country No. 1 ### Gray Forge. White and Mo Countess
10	cents per 10. ### Seper ton. Al Railroad, 70 cents per lb. ### Country No. 1 Gray Forge. White and Mo Countess Glengarnock ### Glengarnock ### Glengarnock ### Tress Am. Renned, a Rails Weish, gold American, at weish, gold ### Common Iron #### Common Iron ##### Common Iron ##### Common Iron ##### Common Iron ###### Common Iron ########## Common Iron #################################
10	cents per 10. ## Seper ton. Al Railrond, or 10 feb. 12 feb. 20 feb. 2
10	cents per ton. Al Railroad, To Compare to Compare to Compare to Compare to Compare to Control of Co
10	cents per ton. Al Railroad, respectively and respectively. The respective respectively and respectively. The respective respectively and respectively and respectively and respectively. The respective respectively and respectively and respectively and respectively and respectively and respectively. The respective respectively and respectively and respectively and respectively and respectively. The respectively and respectively. The respective respectively and re
Per gross \$20 \$40 \$45 \$50	cents per 10. Al Railroad, respectively and respectively
100 100	cents per 10. Al Railroad, To cents
100 100	cents per 10. Al Railroad, To cents
100 100	cents per 10. Al Railroad, To cents
10	cents per 100. Al Radirond, 70 february 100
100 100	cents per 10. 86 per ton. Al Railrond, per ton. Al Rails. Glengarnock. Glengarnock. Glengarnock. Har Iron. Am. Henned, a Rails. Common Iron. ** to 2 in. Found it to 6 in. x % to 8 in. round it to 6 in. x % to 1 in. round it to 6 in. x % to 1 in. x % to 2 in. round it to 6 in. x % to 1 in. x % to 2 in. x % to 1 in. x % to 2 in.
Per gross \$20	cents per 10. **Seper ton. Al Railrond, on the Railrond of th
Per gross	cents per 100. Al Railroad, respectively and respectively

70 '80 '98 1'08 1'28 2 8 4 5 6

N. P. U. A. 25c.; B. 20c.; C, 15c.; D. 13c., P B.

	HE
Planished Pepper Boxes, No. 1per doz., \$1.52	STEEL-DUTY
Planished Pepper Boxes, No. 1	STEEL-DUTY at 7 cents perlb not above 11, 3 and 10 % ad val.
Each	way Bars, in pa reduction of i mented, cast or
Each\$145 1-25 1-40 1-69 1-80 2-25 Planished Oval Chafing Dishes, Imperial Covers. Inch10 12 14 16 18 20 22 24	shall be classed
Each	Spring Homogeneous
Each	Machinery (roun
Section Sect	Sheet
Planished Etnas. on Stands, Pints. 13/2 3 4 5 Exch. 23/201 1:00 1:00 1:00 1:01	Tool, extra fine.
Inch. 10 11 12 14 16 18 20 22 24 Each \$\frac{1}{2}\times \frac{1}{2}\times \	Shring
Planished Oval Melon Molds.	Hammer
Fo ft 1, 2, 8, and 4 O. G. Urnseach, \$2.50 Planisned Oval O. G. Urns Nos 0 1 2 3 4 5 6 7 8	" Extra (" Round " Swage
Kach 8490 545 630 700 775 925 1125 1250 1550 Planished Round Urns. Nos	Swage Best D Blister
Planished Round Oyster Dishes, (Complete), Nos. 1 2 Each \$2:10 2:50	German Steel, Be do 2d Sheet Cast Steel
Name	Sheet Cast Steel,
Tea Pot Handles—P. S. & W	" Squar " Mill. " Taper " Taber
Tea Pot Handles—P. S. & W	SPELTER-D per 100 lbs.—les Stlesian, cash
ers &c	American " TIN—DUTY: Procent. ad val.; I Manufactures — all subject to
No. 15, Medium, 5½ "930 No. 20, Large, 6½ "1075 Stow's Patent Hollow Tea Pot Handles, Adamantine	Manufactures —all subject to and Pigs, free.
No. 3, Large, 65% in., for Wash Pitchers &c. Solid Iron, Tin Tipped. 18-00 No. 10, Small, 4% Inches. per gross, \$9-00 No. 10, Medium, 55% 950 No. 20, Large, 65% 950 Stow's Patent Hollow Tea Pot Handles, Adamantine No. 12, Bronzed and Tin Tipped. per gross, \$13-50 owerpan Handles, Or Best Butleable Iron. P. 8, & W. dis 20 No. 1, 5½ Inches long Japanned. No. 2, 6 9576	and Pigs, free. Banca Straits. English
No. 1, 5½ inches long	1 C 10x14. Prime (12x12, 14x20, 44
No. 3, 6½ " 4·00 No. 4, 7¼ " 4·25 No. 5, 8 " 4·25	1 X 10x14, " 12x12, " 14x20, "
No. 6, 9 " 4-75 No. 1, 5½ inches long per gross, \$4-25	14x20. D C 12½x17 " D X 12½x17 " For each additi
No. 2, 6 No. 4, 6 No. 4, 734	I C 10x14
No. 6, 9 " 5-73 Japanned per lb., 16	I C 10x14 I C 12x12 I C 14x20
Fron Kettle Ears (P., S. & W.)	I C 14x20 4 I X 14x20 I C 20x23 20-5
Nos	1 X 14x20 1 C 20x28, 20.5 1 \(\) 10x28, 20.5 1 \(\) 10x20 \(\) 1 2 \(\) 10x20 \(\) 1 2 \(\) 2 \(\) 2 \(\) 10 \(\) All Sheet.
Nos	Sheet
Black	Paper St
Per gross pairs. 100 125 150 175 200 250 300 Mattheathe Iran Kellie Fars for Coat Hods +	Canvas linen
	White linen rags
No. 40 Extra Large b. 20c; "16c In cases of 100 lbs. each. Milk Care or Botler Handler—(P. S. & W.) 4½ indis 25 %	Mired moolens
able Clips or Ears to match, Timed	Soft woolens Gunny bagging. Jute Butis Kentucky baggi
Plain with Cast Sc Plumbers: Scrapers—(P. S. & W) 4585 Extra quality, length 6 in., per doz 5100	Keatucky baggi Book stock Waste paper and Rope cuttings Kentucky Baio r Oakum junk, No
METALS.	Grass rope.
	Tarred Shaking. White Conar Cur
Hoop and Scroll, 11/2 to 11/2 cents per 10. Provided, that none of the above Iron shall nay a less rate of duty than 55 per cent. Pig. 47 per ton: Polished Sheets, 2	Envelope Hard White Shav Soft White Shavings, Mixed Shavings, Imperfections, N
IRON.—DUTT Bars, 1 to 1½ cents per lb Shect, Band, Hoop and Scroll, 1½ to 1½ cents per lb. Provided, that none of the above Iron shall nay a less rate of duty than 35 per cent. Pig. 37 per ton; Polished Sheets, 2 cents per lb.; Wrought Scrap, 38 per ton; Cast Scrap, 36 per ton. All subject to a reduction of 10 per cent. Railroad, 70 cents per 100 lbs. Boiler and Plate. 1½ cents per lb.	Imperfections, N
cents per lb. Pig Iron—American. Foundry No. 1	Book Stock, Mix No Prints Pure Manilas
White and Mottled SCOTCH.	Commons Binders' Board C
Per I For — AMERICAN. # ton. \$27 (0) (a) 28 (0) Foundry No. 1. # 50 (0) (a) 28 (0) Foundry No. 2. # 35 (0) (a) 26 (0) Gray Forge. # 25 (0) (a) 27 (0) White and Mottled. # 37 (0) (a) 28 (0) Cortness. # 37 (0) (a) 28 (0) Gelengarnock # 36 (0) (a) 37 (0) Eginton. # 34 (0) (a) 55 (0) Bar Iron. # 34 (0) (a) 55 (0)	Copper
Am. Renned, at millnominal	Heavy Composit
Rails. Welsh, gold Wton, 49 00 45 00 00 Welsh, gold Wton, 48 00 46 50 00 American, at works, currency 48 00 46 50 00 Old Rails 28 00 46 30 00 Scraps Craps Cra	Wrought iron
Wrought Scrap	Machinery Iron.
Ref Pen from Store	Spelter
₹ to 2 in. round and square 62 50 @ 65 00 1 to 6 in. x ⅓ to 1 in 62 50 @ 70 00 1 to 6 in. x ⅓ and 3-i6 67 50 @ 70 00	Pa
Shatting from 5% round and square. 67 5 @ 110 00 Rands 80 00 @ 82 5 7 8 90 00 @ 133 00	las is, lamp—Cord
	Black Paint in o
Sheet Iron. common R. G. R. G.	" Chinese, di
Nos. 10 to 20	Van Dyk
71	Green, Chrome.
American and English	Mineral Paints Orange Mineral. Red Lead, Ameri
Patent Polished. \$ 15c Russia, Nos. 8 to .6. 17½c Stained. No. 1. 16½c Belgian. 105c	Mineral Paints Orange Mineral. Ked Lead, Ameri "Englis" Venetian (N
	Hose Pink
One piece Corrugated Sneet Fron Enows. THEREOAL IRO \$ 5 5 6 7 10ch. \$ 5 5 6 6 5 9cr doz. RUSSIA IRON. \$ 7 10ch. \$	Umber, Burut
45 5 7 00 950 12:00 14:00 per doz. COP1 ER - Doly Pig, Bar and Ingot, 5c.; old copper,	Umber, Bu nt Raw in o Vermillion, Chin Engl Tries Ame
COPIER -Doir. Pig. Barand Ingot. Sc. old copper. 4 cents # a; Mahufactured (including all articles of which copper is a component of chief values as a valorem. All subject to a reduction of 10 per cents of the component in the component of the	Engl
SHEATHING. BRAZIERS' COPPER. BOLTS, &C.	White Lead, Ame
Braziers Copper, ordinary sizes, over 16 oz., per square foot	Chrome
Circles less than 84 inch in diameter	Zinc White, Au
Circles less than 91 inch in diameter. Se \$\psi\$ Directles, \$4 then diameter and over. Sec. Segment and Pattern Sheets. Sec. Locomotive Fire Box Sheets. Sec. Sheathing Copper, over 12 oz. per \$9\$, ft. and ughter. Sec. Sheathing Copper, over \$2 oz. per \$9\$, ft. and ughter. Sec. Soc. Sec. Sec. Sec. Sec. Sec. Sec. Sec. Se	I Inneed Paw
Rolt Copper	Whale, Crude
O'NEILL'S PATENT PLANISHED COPPER. 14 and 16 oz. and heavier	Winter
14 and 16 oz. and heavier	Seal, Extra Refin Lard, Pure Winte Spring. Cotton Seed, Cru Sou
14 and (Cand heavier	Neatsfoot, Wint
16 Ub	Asphaltum
14xi3, by the case 8c. \$\psi\$ sheet 1xxi3, least than case 10c. 1scoffer sizes, \$\tilde{\trilde{\tilde{\tilde{\tilde{\tilde{\trilde{\tilde{\tilde{\tilde{\trilde{\trilee{\tilde{	Chalk
per ib .: Pine and Sheet, Jk cents per ib. All subject to	Flocks
per ib.: Pipe and Sheet, 4% cents per ib. All subject to a reduction of 10 per cent. Spanish	Sheet
Engfish	Damar
\$ reduction of 10 per cent. \$panish.	Putter in bladder
M. P. U	Putty in bladder in bulk Rotton Stone, so Spirits Turpentin

HE IRON AGI	T
STEELDUTY: Bars, Ingots, Sheets and Coils, valued at 7 cents perib., or under, 2% cents; over 7 cents, and not above 11, 3 cents per 1b.; over 11, 3% cents per b. and 10% ad val. Railway Bars 1% cents per b. Railway Bars, in part Steel, 1 cent per 1b. All subject to a reduction of 10 per cent. Provided, that Metal concented, cast or made from from by the Bessenter or preumante process, whatever form or description, shall be class 4 meritagn Cast Steel.	1
Tool	be
Tooi	
## 3d quality 11%c ## 3d quality 11%c German Steel, Beat. 11%c do 2d quality 10%c Sheet Cast Steel, 1st quality 18c ## 2d quality 16c ## 3d quality 16c	
File Steel, Flat and S. Round "12%C Square and Round "13c "Mill. "13%C "Taper to 4 Inch. "15c "Taper s and 3% inch. "18c SPELTER—DUTY: In Pigs, Bars and Plates, \$150 per 100 lbs.—less 10 per cent. 6% @ 7c, gold American "6% of 1c, currency TIN—DUTY: Plates, Sneets, Tagger and Terre, 15 per cent. ad val.; Electro-galvanized Plates, 2 cents per b; Manufactures of und currency of the steel of th	
Taper to 4 men. 1.1c **PELTER—DUTY: In Pigs, Bars and Plates, #1 50 per 100 lbs—teas 10 per cent. 61 % @ 7c, gotd American **Sitesian, cassl. 61 % @ 7c, gotd American **TIN—DUTY: Plates, Sneets, Tagger and Teme, 15 per cent. ad val. Electro-galvanized, #5 per cent. ad val. —1 sper cent. ad val. Electro-galvanized, #5 per cent. ad val. —1 subject to a reduction of 10 per cent. Bars. Block and Pigs, free. Banca, subject to duty of 0 #56c, gotd Straits. 4 % 25c, gotd English CHARCOAL TIN PLATE. 7 % 25c, gold CL 10x14, Prime Charcoat. 11 Place 11 12 12 12 12 12 12 12 12 12 12 12 12	-
X 10x14,	C
I C 14x20 \$.0.25 9:25 @ 9:75 8:25 @ 9:50 X 14x20 12:25 20:50 @ 91:00 19:50 @ 9 :00 16:50 @ 18:00	•
200 2 200 ft. 2400 ZINC DUTY: Pig or Block. \$1 50 per 100 lbs. Sheet 25c. \$2 B. All subject to a reduction of 10 per cent cask 105c open 105c C	I
(Dealers' Selling Prices.)	-
** cotton: No. 1. 6% 65 7	
Jute Butts 24 66 28 Keatuckv bagging 58 66 34 Books stock 1 66 48 Waste paper and scraps 6 (1) Rope cutrings 1 66 19 Kentucky Baie rope 4 66 49 Oakum juns, No. 1 55 66 58	(
No.2	H
Canvas linen	9
Pure Mantlas 2 2 2 2 2 2 2 2 2	I
Yellow metal.	I.
Paints, Oils, etc.	-
Paints. Pain	
Black Paint, in oil	1
" Van Dyke. * *c armine, 49. * *12'4' 9 Green, Chrome	
Orange Mineral 14 %c feed Lead, American 9 %c iii English 10 %c iii Venetian (N. C.) dry 2 %c iii indian, dry 10 c tose Pink 10 c tose Pink 10 c	
Rurut	T
Paints, Oils, etc. Paints. Paints. Paints. Paints. Ordurary Paints. Ordurary Pair Se and Ordurary Pair Pair Pair Black Paint in oil Sing of Se Se; sast'd cans, 11 c Sing, Prassian, fair to best Chinese, dry In oil Se Se Brown, Spanish. Parts. Parts. Parts. Parts. Parts. Parts. In oil Se Se "In	
Vermont In casks 150 Chrone	I
Unseed Raw. Usis. Holled Sec. 1982. Casks, 7sc. pols. Sec. Bolled Sec. 1982. Crude Sec. 1982. Sec. 1982. Crude Sec. 1982. Sec. 1982. Crude Sec. 1982. Sec.	
Bleached Winter	1
White	8
Aspinite. Figure	-
Sheliac, English. 85c dark. 75c Litnarge	

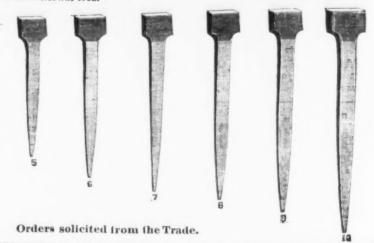
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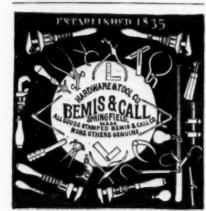


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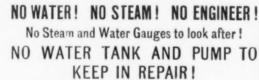
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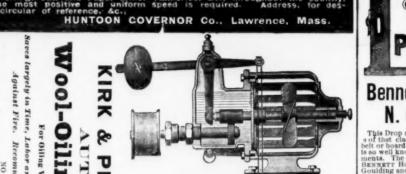
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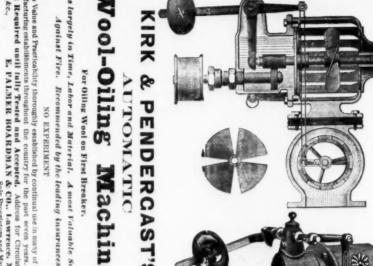
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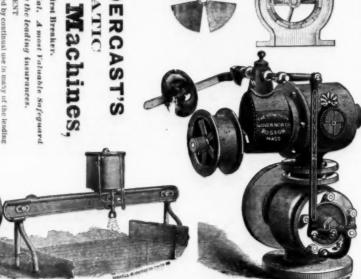
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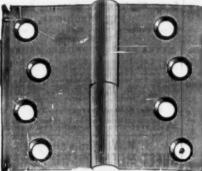
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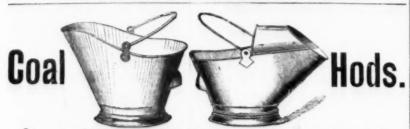
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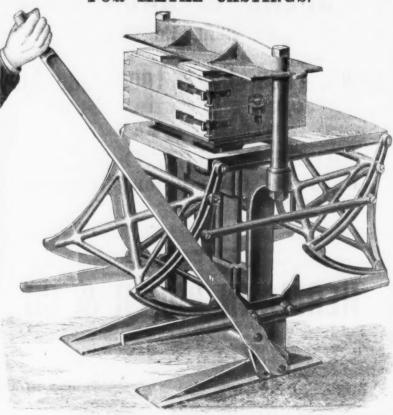
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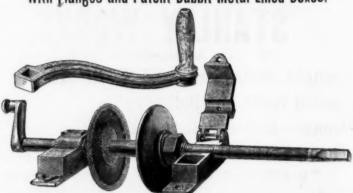
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	Rowland's Plain Back, Jan. 28d.	G:
-	Shove Sand Sondes Rowland's Plain Back Jan 28d dis 30 %	22 26 W N
1	5%c Brass.—Iron. new list, Jan. ist, 1814, dis 52% % Brass.—dis 52% %	Ba Lro En On
		555
	Britannia	Le v
	Trv Squares. Winterbottom dis 10 @ 15 % Stanley Rule and Level Co. dis 45&10 % Willis Thrall, No. 2. dis 30&10 % Disston's No. 2. dis 40 %	Sh An
	Store Polish, Gern	Sa Br Do
	Imitation of the state of the s	Thi
	" Malleable Bar. dis 60 & (Kellogg) Malleable Bar. dis 50 @ 10 & Tafts Pattern (Wrought Bar)	Fla Fla Iro No
	** Improved Baxter dis 25 % ** Improved Baxter dis 25 % ** Adjustable Fork dis 25 % ** No. 19 to 28 dis 45 %	Bee
	Wire. − No. 0 to 18. dis 25 % No. 19 to 26. dis 45 % No. 27 to 56. dis 47 % No. 27 to 56. dis 47 % Coppered to 50 to 12. dis 16 6 20 % Thaned Broom Wire. dis 25 % Galvanized Wire No. 0 to 18. dis 40 %	Car Plo
	BUFFALO.	Ma Con Bo
	Reported by Mesers. Sidney Shepard & Co.	Pat Pat
	January 1, 1875. AugersSnell Mfg. Co	Wa
	Bits, Auger—Snell Mfg. Co	Wa Nu Nu
	Bolts—Carriage and Tire. uls 75&10 ≤ Braces—Bit, Spofford's 1'atent uls 40&5 ≤	Ha
	Boards—Stove, Brooks' Patent. dis 50&71/4 %	Pa
	Butts—Brass	Sk
	" Broad, Loose Joint	Sci
	Beiting—Rubber	Bei
	Brick—Bath (box of 2 doz) Hest English \$1.25	Sti Fo
	" Rutherford"	Se
6	Red, Carpenter's	Ca Br
	Bide, "\$1-17 Chisels—Firmer Socket. dis 80&10 % Framing Socket dis 61x80	1
16 16 18	Bite	Br
i c	Castings—Malleable # D 10c Clothes Wringers, "Novelty 'No.2. # doz \$60 (0) Elbows—Corrugated 5 5 6 7	W
1	Charcoal	1
1 1	Fluters-Geneva Hand. \$\\$\ \dot \text{doz}, \$15'00 \\ \text{Freezers tec Cream}\$-\\$' \text{Champion} \text{.dis 30 \text{ \text{S}}} \\ \text{Haumers-Henry W. \$\text{K}_{10}'\s.} \end{array}	1
2 2	Hinges—Window Binda— Clark's. dis 55&10 %	
6 6	Wrought Strap and T. dis 36&10 % Hods. Coal—Plain. Black and Galvanized. dis 10 %	5c In
0	Fancy and Helmet. dis 10 % Hooks and Staples—Wrought dis 70% 16 %	w
2 2 2 2	Hasps and Staples—Wrought	81 W
n	Kettlos—Brass. # 5.45c Enameled. dis 50cc 7 Knives. Drawing—Oval No.1. dis 60c 17	w
200	Funnel, Black and Galvanized. dis 10 g Fancy and Helmet . dis 10 g Hooks and Staples—Wrought . dis 10 g Hooks—Belt . dis 90 g Hasps and Staples—Wrought . dis 90 g Hasps and Staples—Wrought . dis 90 g Sad Irons . 3% c Kettles—Brass . \$2 c Enameted . dis 90 g Razor Blade . dis 90 g Tuouiar . No. 1 5 10 Tuouiar . Tuouiar	1
8	Lanterns "Peeriess." No. 10 10 10 10 10 10 10 1	St
0	Milis. Conee—Box and Shae, common	Do
t	Nails—Clout and Finishing dis 25 % Shoe. dis 75 %	St
d	Horse, Ausable	N
d	" Clinton	K
XXX	Packing—Rubber	W
M M	Case lots dis 20 % Paint—White Lead, U. S. Gov't 8 8 8 8 6 Rivets—Iron, Black and Tinned dis 28-714 &	W
*	Rope—Manila. ¼ inch and larger	DOTNE
% 10	Screws—"American Screw Co"— Flat Head, Iron	T
*	Spoons, Iron Tinned	T
	Britannia	
A 25 M	Saws—Henry Disayon & Sons. dis 12/5 % Scales—Buffalo Scale Works. dis 25/5 Fairbanks. dis 15/6	T
10	Stove Polish—Gem # gross, \$150 Dixon's 600	
28 21 10	Tacks—Half Weight Am. Irondis 72/467/4 Vases—Palace Ccal	
18	Ware—French, Tinned and Iron	
8	Tin Plates.—Add for each X	
* *	12x12. 1236x17, 1275 20x28 X. 4 26.75	
%	Pig Tin—Stratts 38c ≥ 29c Bat Tin 30c Solder No. 1, 16%c; No. 4, 15%c	
% ×	Pointed & Polished	B
MM	Lasale	0
RWWH	Tinned	
XXX	Capper—Sheathing 14 @ 18 oz. 210 % 5 300 Planished. \$ 5 36c @ 38c	
%	Bolts. # 532 Bolts. # b 532 Braziers' Sheets. # b 32c	
BENE	\$4 7	9
AMA	24 W. D. Wood & Co., Smooth Finish	0
1 %	Gen. Russia, No. 1 Statised	F
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		
et		
50 et	Reported by Sellew & Co., Importers and Jobbers	11
10		o P

_		_
T	Nickel	-
	Com. B. Fin. S. L. U. D Re'fd. 15 to 20	1
	180 180	
	Com. B. Fin. S. L. U. D Re ed.	U
	Chatcoal Iron. 4½ Inch.	٧
	Leader Elbows, Flat Crimp Retinned or Gal vanized.—Dis.10 %	
	2-inch	
	valized. Dis.10 s # doz. 2-inch. # 1 75 2½-inch. # 2 75 5-inch. # 2 25 3½-inch. 8 2 75 5-inch. # 2 25 3½-inch. 8 2 75 4-inch. # 3 51 5 5-heet Iron Bread Pans. # 5 10c American Broilers. # 0.2, 8(3/5). 7 inmen's Machines # 0.25 # 3 3/6 3-d Irons. # 5.36 # 3 3/6 Brass Ketties. Adsonia # 8/6 Dog Irons. \$ 3/6	
	PHTTSBURGH. The following are the Card rates of Lewis, Oliver & Phillips, H. B. Newhall, Il Warren St., New York, Agent, Card rate, 2 & Off net, Card rate, 2 & Off net, Card rate, 2 & Off net, Card tall (1/3×4), Dunched and coun'sunk44 * * * * * net fait fail (1/3×4), Dunched and coun'sunk44 * * * * * * * * * * * * * * * * *	
	card rate, 2 % off net. Flat Rall (1¼x¼), punched and coun'sunk. 4'4c P net Iron Wedges. ¼c P net Norway Xull Rods. 94c P net	
a Law Mar	That I 13 x 3 x 1 punches and count atm. \$40 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	
	% round bent to shape 20 9 ft of fence less 15 % off	
-	net. Discount off Standard List. Carriage and Tire Bolts (new list)	8
	Sachine and equare lead boils. Sachine and Edg Screws. Sachine and Edg Screws. Sach 19 5 67 met Pat. Hot Pressed Square and Hexagon Nuts. small sizes, from 3-16 to 34 in	
6 5	Pat. Hot Fressed Square and Hexagon Nuts, large sizes, from 7-16 to 2 in	
6 6	large sizes. from 7-16 to 1% in	
6 6	Nuts and Washers in 5 lb. boxes, 1½c. * b ex. Harrow Teeth, in lots of 1 ton or mure, packed in casks.	
N 36 W	1 in. diam. 3%c w m net; 3., % in. diam. 3%c w m net; % in. diam. 4c w m net. Patent Headed Harrow Teeth, packed in casks, %c w m ex	١
	Skein Bolts, in bulk, in lots of 1 keg or n.ore, % in. diam. 5 c 2 n net; 9-16 in. diam. 6 c 2 n net; ½ in. diam. 7 ke 2 n net; 1 n. diam.	
5	each size is ordered. Screw Hook-and-Eye Hinges. % to 1 in. diam. 9c @ 75	
2	7% where. It we betth when less than I kee of each size sordered. Screw Hook-and-Eye Hinges, \$\frac{1}{2}\$ to 1 in. diam. So \$\mathbb{B}\$ net; \$\frac{1}{2}\$ in. diam. 12c \$\mathbb{B}\$ net; \$\frac{1}{2}\$ in. diam. 12c \$\mathbb{B}\$ net is 10s of 100 pairs or more, 14 to \$\mathbb{H}\$ in. sorting, \$\frac{1}{2}\$ (\$\mathbb{B}\$ net it. \$\mathbb{B}\$ to \$\mathbb{B}\$ 12n. long, \$\frac{1}{2}\$ & \$\mathbb{B}\$ net the sorting of the control of the con	
5 0	tomaty.	
c	For purchases amounting to \$4250 between May 30th and December 31st, 5 % extra off. Screw Hitching Rings. \$5 25 \(\pi \) 100 net Duck Nest Tuyere Irons. \$11 50 \(\pi \) doz net Cast Iron Washers. \$6 15 0 \(\pi \) doz net Cast Iron Washers. \$6 15 0 \(\pi \) net Cast Iron Washers. \$6 15 0 \(\pi \) net Cast Iron Washers. \$6 15 0 \(\pi \) net Cast Iron Washers. \$6 15 0 \(\pi \) net Cast Iron Washers. \$6 15 0 \(\pi \) net Cast Iron Washers. \$6 15 0 \(\pi \) net Cast Iron Washers. \$6 15 0 \(\pi \) net Gamma for \$6 15 \(\pi \) net Gamm	
7 %	1 to 2 in, diam. over 8 ft. long	1
8	%, % and % in. dlam. over 4 ft. long 44c net %, % and % in. dlam. from 1% to 4 ft. long 51c net Bydge bolts with proceedings.	1
% IC IC	Bridge bolts with upset ends	
S	10 in, long by 7-16 at Screw End. W set of 8 bolts. 55c	
% 10	12 " 9-16 " " 8 " 300	
54	12 " 112 " 1100	1
W 1/4	16 " % " 8 " . 1 10	
MMM	5c we set for each additional inch over 14 in. All lengths made. In ordering Box Strap Bolts please give diameter at Screw End.	

8	Wagon Box Kods, narrow Irack, each	
* CORR	1 3 1 1	
2 22	Wagon Brake Ratchets, each	
%	Wagon Brake Ratchets, each 152 Carlot Wronght Hammer Straps, beavy pattern, each 154 Carlot Rub Irons, each 156 Carlot Rub Irons, each 157 Carlot Wronght Hammer Straps 150 Carlot Wagon 150 Carl	
Z 25 元	"Rub Irona, each	
2 %	Strap Bolts, Rods, Single Tree Irons, Bolster Plates, Brake Ratchets, Hammer Straps, Rub Irons, Stay Chain	
SE DECE	Hooke and Clips, in lots of 59 sets the 25 s Wagon Box Staples, 15 to 25 in to clinch. # 1000 \$11 00 net Nex Yoke Eyrs, each	
% o o o	King Bolts, %, 1, 1%, and 1% in. diam	-
*	Wagon Riveta, 3-16 in, diam, all lengths	1
00 % 60	Wagon and Hinge Nails, kin	
200000	19 c net 20 c net	
	Double Free Fraces 25, c net Coupling 5, c net Coupling 5, c net Neck Yoke Plates 11 c net Tongue exp Fron, 12, 2 & 2; in wide, same price 4 25 as Wacon Chains, Stay Lock and Tongue, 5-16 in, 9 3 io).	1
** 5 %	Band Iron. Wagon Chains, Stay Lock and Tongue, 5-16 in. 9 % 104ce	1
55 5	Wagon Chains, Stay Lock and Tongue, 5-16 in, # 20 10% of net. 4 in., 11% c. net	1
***	DETROIT.	1
MMM	(Reported by Messas - Jewett & Root.) Tin Pinte Best Charcoal (Copper IC 10014 - \$1150 Sheathing	1
50 00	Tin Pinte.—Best Charcoal Copper.— 10, 10x14	

DETI	ROIT.
(Reported by Messi	8 - Jewett & Root.)
Pin Pinte Best Charcoal	Copper
IC, 10x14	Sheathing32c
LX, 10x14 14 25	Copper Bottoms34c
XX,10x14	Planished Copper.
IC, 12x12	Sheathing, 14x48886
IC, 14x20	Boiler Size, No. 7 400 No. 8 400
IX. 14x20	" " No. 940
XX,14x20	Pig Tiu
XXX, 14x30 30 75	Large Pigs296
XXXX. 14x20 28 50	Small Pigs2914
	Bars
DX, " 18 75	SolderNo. 1 160
DXX, " 16 50	No. 2 15
DC, 100 Plate. 11 00 DX, 18 75 DXX, 16 50 DXXX 18 25	Bright Wire dis 87%
DAXAA 100 Pinte 42 00	Sheet Iron
IX, 14x14	No. 18 Am. Com 4 9 No. 24 Am. Com 5 0
[X. 10x14 W	Patent Am. Russia "A,
Roofing TinBest Char.	Nos. 24, 25 and 26,14
IC, Terne, 14x20\$10 5)	Russia, No. 9, 10, 11&12. 18
IX. " 14x20 18 25	W. D. WOOD'S & CO. S SHEE
IC. Terne, 20x28 23 00	(BON.—
IX, " 20x28 27 00	Nos. 15 to 20 Smooth #6 1
Coke Tin.	** 21 to 24 6 8
IC, 10x14 Coke 89 75	** 25 & 26 6 6
IX, 10x14, Coke 12 50	
IC, 14x30, " 10 75	" 25 & 26 " 8 0
Any widthlic	
Any width	I I The second s

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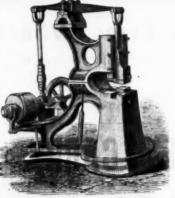
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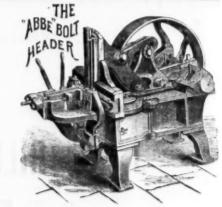
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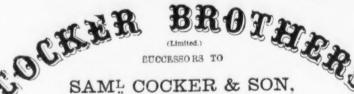
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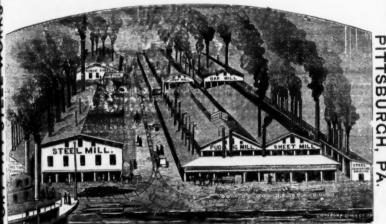
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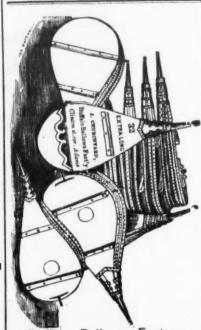
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-	cago, Ill.; South Western Exposition, New Orleans, La.; 811 & 813 North Second	5 to 6per doz \$9 00 : 6 to 7, \$9 50 Plus,—Universal Hat and Coat all wood—	Geo. Barnes & Co.'s Knivesdis 20&5 \$
ט	C. HENRY HALL & CO.,	2 in ♥ gross \$2 50; 3 in., 8 5 ; 4 in., 4 50—dis 15 % Potato Digger.—	Rond Scrapers. Steel dis 25 %
Y.	20 Cortlandt Street, New York City.	Little Glant—Large	Sr. Louis Revolving 14 tooth 5.50 net 16.6 600 net Hand Hav Itake dis 10.5 Renper haives and Sections. Geo. Barnes & Co.'s Knives dis 28.5 Rend Scrapers.—Steel dis 28.5 Rend Scrapers.—Steel dis 10.25 Sad J rons.—Monitor Brand, Sliver Poilshed. 4 28.6 Sand Venghas.—Standard Solid Eyes. 4 33.4 Saws.—Hubbard, Lippincott, Bakewell & Co.'s.dis 10 Branch. Crooks & Co.'s.
	GRAHAM BROS.,	Single, 75c. 88c. \$140 \$1:18 each. Double, \$1'00 112 123 1:60 "	Sans Weights,—Standard Solid Eyes. # 5 34 Saws.—Hubbard, Lippincott, Bakewell & Co. a.dis 10 Branch. Crooks & Co. a. Scythes,—Dunn Edge 1 ool Co. s
	London and Stockholm.	Single, \$1:00 1:13 1:35 2:40 2:5 1:75 each	Premium 950 dla 25 Diamond Grit 18 50
	Engineers, Anglo-Swedish Merchants And Engineers' Agents.	Single, \$100 113 138 200 25 115 each. Double, 188 230 268 864 400 500 Inside Iron Strapped Blocks, with Patent Roller Bush-	Shovels, Spades and Scoops.— Lippincott'sdis 20 1
-	First-class Makers of Machinery & Specialties,	Single, \$1.25 1.50 1.65 2.0 2.65 8.50 each.	Steel Face Polished
	First-class Makers of Machinery & Specialties, &c., desirous of extending their exports, will find it in their interest to supply us with full particulars and	Platea Ware.—Rogers bros new list dis 40&10 \$	Spaths and Crudies Seymour Mfg. Co.'s. dis 20 f
	prices, &c., &c. London-122 Cannon Street. E.C.	No. 1, Iron and Wood Center Levels	Carriage and Express
		No. 3, Iron Pocket "dis 35 %	Thimble Skeins, Fump & Skein Co.'s dis 60 % Vises, Solid Box
	CHICAGO.	No. 5, Iron Pocket Levels, per square and straight edge	Wilson Mig. Co.'s
	(Reported by Frank Sturges & Co., 72, 74 & 76 Lake St.)	No. 6, Improved from Bench Planesdis 20&10 % Pocket Knives.—Conn. Cutterv Co new net list	Coes' Pattern
	Tin Plate. 10x14, 1C, Ch'i. Good.\$ 14x20, 1XX. " 18 00	Rakes.—Cast Steel, garden	Wingors. Crown. Wagons.—Whitewater Farm Wagons.— v doz \$80 00 Wagons.—Whitewater Farm Wagons.— Thimble Skein. No. 3, 890; 3%, 884; 3%, \$85 Iron Axle
	10x14 IX, " " . 14 50 DC. 100 Plate, " " . 12 00 12x12 IC. " " . 12 50 DX. " " . 14 50	Inside Iron Strapped Blocke, with Patent Roller Bush- 15	Iron Axle No. 1%, \$-5; 1%, \$90; 1%, \$95
	12x12, IX, " 15 0) DXX, " 1700 14x30, IC. " 18 0 DXXX. " 19 50	Rivets,-Blackdis 25 % Carriage, oval head. Nos. 3, 4, 5, 6, 7, 8,	
1	(Reported by Frank Sturges & Co., 72, 74 & 76 Lake St.) Tin Plate.— 16x3a, 1x, Ch'i Beat, 815 50 19x14, 1C, Ch'i, Good.\$ 4x3a, 1x, x 18 00 10x14, 1C, thest. 12 00 14x3a, 1x, x 20 50 10x14 1X, 14 30 DC, 100 Plate, 12 00 12x12, 1C, 12 50 DX, 14 50 12x12, 1C, 14 50 12x12, 1C, 15 00 12x12, 15 00 14x3a, 16 00 14x3a, 16 00 16	Rubber Moldings.—" Harmon's"dis 10 %	St. Louis Metal Market.
	20x28, IC, Charcoai Robbing, Colar 20x28, IC, "Fair	No. 3, for Windows	(Corrested Weekly by Memrs. R. Sellew & G
	Roofing IX. Charcoal 14 0 0 20x2s. IC. Charcoal Roofing, Coin 22 00 20x28. IC. Fair. 22 50 20x28. IC. Best 22 50 20x28. IC. Best 22 50 20x28. IC. Best 22 50 20x28. IX. Divide III. Divide	tion Hangers. per foot 70, dis 30 g Rayets.—Hack. dis 25 g Carriage, oval head, Nos. 3, 4, 5, 6, 7, 8, 18 18 g Rubber Moldings.—Harmon's" dis 10 g No. 2, for Windows. per foot, 5c No. 3, for Doors. per foot, 10 g No. 3, for Doors. per foot, 10 g No. 4, per foot, 10 g No. 4, 10 g No. 4, 10 g No. 5, 10 g No. 6, 10 g No. 6, 10 g No. 6, 10 g No. 7, 10 g No	Tin Pinte. IC, 10x14, Char 12 00 IX, continuous, IX, 10x14, 14 55 20 In. x 200 rt
	14x20, IC, "	SawsHand and Panet— Wheeler, Madden & Clemson's, same list as "Dis-	1C, 12x12, 12 12 50 IC, 10x14 best 11 C0
rs	Large Pigs	ton's"	IC, 40x14, Chai 12 00 IX, continuous, 1X, 10x14, 44 5. 26 IIX, 200 rt
10	Zinc.—Sheet, 500 to 1000 lb. Casks	Disaton's	1.X, 10x14,
	Slab Zinc or Spelter	" Champion X Cut. " 50c " One Man X Cut. each, \$2-25	IX 14x20, " 14 t0 IC, 14x20, t1 00 1C, 25x28, " 28 00 IC, 14x20, Coke Lead. # t6 IX 20x28. " 27 00 IC, 10x14, punch'd for Safes. 10 0
	Sheathing	Boynton's genuine Lightning X Cut per ft., 60c	20 in. x 20 ft
	Ingot24c to 26c	Circular—Wheeler, Madden & Clemson'sdis. 25 g	Hiock Tin. Large Pigs Straits
	Braziera' Sheeta.—	Aiken's	Sheet Zinc. Cusks \$ \$ 10%c Sheet \$ \$ 11c
,	30x60, 10 & 12 lbs 88c Solder. F. S. & Co.'s make.	"Willoughby Lake," first quality # gross \$6:50 second quality # 3:00	No. 1, Kenned, in bars or plate
	Ingot	Alken's discostion of the North Parker's Parker'	Pig Lend
	Babbit Metai-F.S. & Co.'s	Snow, Malleable from Tip, D Handle—Agents for New England	14 to 16 lbs., Sheets 30x60
y.	Sheet Iron Smooth Smooth	for New England	6 to 9 lbe
	No. 24 5 c 6 c 71/6 91/6	Spading Forks,—M. & E	Planished, 14 and 16 oz. 14x4s
. Fi	25 & 36 5 % c 6 % c 7 % c 9 % c 27 5 % c 6 % c 8 c 10 c	Tools.—Aiken's Pattern, 20 in set ; Parr's 48 00 per dor Traps;—Oneida	Sheet from Com'n. Sm'th. Charl. Jan'ld
ester.	No. 16 to 20	Vises, -K. P. & Co.'s Solic Box, Blacksmith 9 18 19	No. 22 to 21. 4 c 5 c 7 c 9 c 9 c
v. Со.,	Common Com. Charcoal, Junista. No. 24 5 c 6 c 754 954c 954c 27 c 954c 954c 77 c 954c 954c 77 c 954c 954c 77 c 954c 954c 77 c 954c 9	Parker's Farallel	No. 27
a. lphia.	American Russia. B	Wardrobe Hooks.—Wire to drive w gross \$1 00 weather Firips.—"Harmon's"per doz \$5. dis 10 s	Iron Wire
Co.,	Lend.— Ibed Pipe, in full colls .8%c	Weights.—Window Weights 9 8 2340 Wedges—Axe	Copper Rivers and Burs dis 25 &
	Bar	Wire.— Eureka, in spools, No. 28 to 40 assorted # gross 43 & Wire Netting.—Citaton Wire Clota Co., Green, Drab or Black # ft 60	No. I stained, P B.
	25 & 25 14c Russin Iron-	Drab or Black	Sheet Zinc.

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Reported by Macomber, Bigelow & Dowse, 156 to 164	
ngers.—Watrous Ship	1
xes.—Forester's Favorite, Bronzed. \$12.00 Blue Jackets, Blue. 11.5 Excelsior, Black. 11.0 Chopper's Prince, Bronzed. 10.50 Red Cross, Hed. 10.00 Hed Cross, Handled. 12.50 Boy's Handled Blue Jackets. 12.00	т
xe Handles.—Wadleigh's Oak— A (Extra) \$2.50. B (No. 1) \$2.00. C (No. 2) \$1.50 P.doz	
Kella, Sleigh—Fancy Body, Patent Leather, Cloth Bound, White Metal, 30, No. 1. Fancy Body, Patent Leather, Cloth Bound, White Metal, 36, No. 1. Fancy Body, Patent Leather, Cloth Bound, Extra Tinned, 30, No. 1. Fancy Body, Patent Leather, Leather Bound, Extra Tinned, 30, No. 1. Fancy Body, Patent Leather, Leather Bound, Extra Tinned, 36, No. 1.	Z
tra Tinned, 38, No. 1. 2-50 Fancy Body, Patent Leather, Leather Bound, Silver Plated, 39, No. 1. 3-38 Fancy Body, Patent Leather, Leather Bound, Silver Plated, 36, No. 1. 3-56 Shaft, Strap, White Metal, House Bells, extra, 6, No. 1. per patr, 50c. Common, 6, No. 1. 46c.	
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tora xBest Refined № 14c	١
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Soring Machines.—Angleeach \$4 75 Common. Snell's qualityeacn 3 75	
Braces	A
Erass Butts	A
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Fancy Japanned, No. 4, 15 in., \$8.00; 5, 16 in., \$9.00; 6, 17 in., \$10.00.	1
Fancy Galvanized, No. 4, 15 in., \$11.50; 5, 16 in., \$13.00; 6, 17 in., \$14.00.	1

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	No. 1, Iron Handle
	No. 2, Wood Handle
	Chisels "Buck Bros.' Shank Goodsadd 20 @ 225
	Socketadd 22½ @ 2
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	17 In., \$10 00.
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	6, 17 in., \$17.00.
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	American Tarred Hemp Lath Yaru & D.
	Corn trooksper doz &
	Cow Tiesdis i
	No. 30, Open Ring, 3 Toot, No. 6, with Toggle
	No. 30, " 8 " No. 6, " Snap
	No. 40, " 8½ " No. 5, " Toggle
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(Corrected by Fuller, Dana & Fitz.)	
Tin Plates.—**E box 1. #C Char Rote 1	88c 80c 24c 9 b 6 c 8 ic b 8c b 14
Fron.—Succt Iron, Russia. Sheet Iron, English. American Refined. Plate Iron. Wedish and Norway Bar Iron, gold. # ton, \$ Shapes, gold.	
Norway Nati tods, first quality, gold. Best Refined Bar Iron The "Burden Sest" Iron. Americas Pig Iron, Foundry, No. 1, x. "No. 2, x. Gray Forge. "Scotch Pig Iron.	
Wrought Scrap Iron	35 08 10c 8 0 65c 45c 8 0

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Apple Parers.—Conqueror
Axes.—James & Co.'s 11 50 Pioneer 12 50 Lippincott's 12 00 Hunt's 12 00
Axies.—Kritch & Crane Mfg. Co.'s— Patent Taper Axies, Swellest Taper, Concord and Red Jacket Axies
Bellows.—Best St. Louis make
Bella, - Troy, Church, School and Farm Bella. W 3 48c
Belts.—Arms, Bell & Co.'s Carriage and Tiredis 75 % Arms, Bell & Co.'s Machine
Narrow Fast Joint dis 35 % Broad Fast Joint dis 50 % Loose dis 65 % Reversible dis 60 % Japanned and Silver Tipp_d dis 60 % Loose Joint "Acorn" dis 60 %
1'000 4 mile Acorn
Corn K nives.—Dunn E'ge T'ol Co.'s Clip
Corn Shellers.—Sandwich Mfg. Co.'s— Power Shellers
Cotton Gins Dubois Patent
Crow BarsSteel Pointed
Culver's Fon Diag Saw
Fanning Mills.—Nash & Cutt'sdis 15
Feed ('utters.—Burdick's Nations) dis 15 % Baldwin's American dis 15 % Sanford No. 1, \$12 (0); No. 2, \$8 75 net
Aulum Mfg. Co.'s Hav and Manure Forks dis: 314 %
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Hammers, Masons' Hammers \$200 Smitns' Hand 220

Handles. - No. 1 Fork, Hoe and Bake. No. 2 Fork, Hoe and Bake. Harrow Teeth.—1 Inch iron... & and & Inch iron. Biarbed or Headed.

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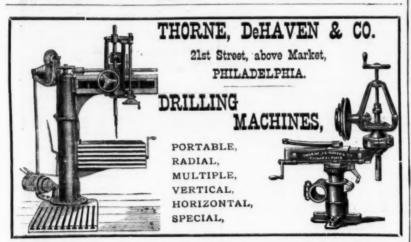
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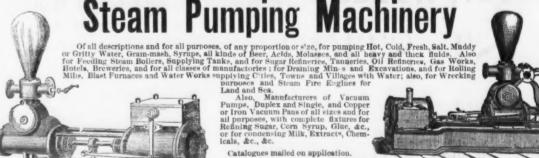
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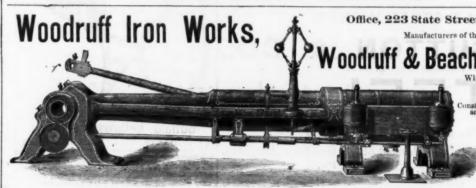
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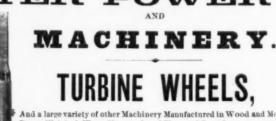
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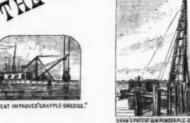


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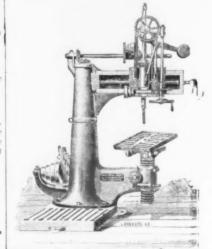
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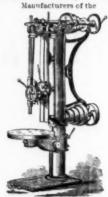
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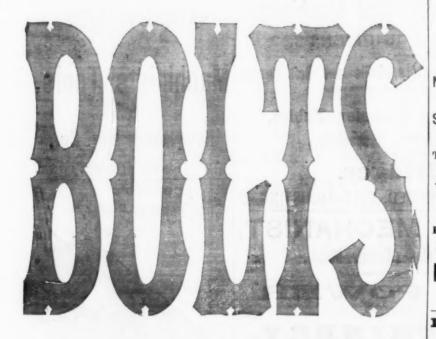
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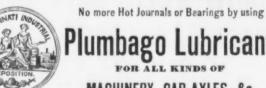


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